



Industrial Batteries and Energy Storage

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The Valen Story

Valen was founded as Regal Electro in 1999. Over the next few years, it became apparent that there was a growing need in the industry for a battery supplier who knew the characteristics of various battery technologies and understood the technical manufacturing procedures to ensure a quality product.

- 2009** Opened premises in Hallam, VIC, to ensure fast service & delivery to clients.
- 2010** A presence in New Zealand was established.
- 2015** Successfully completed its first ENLiFEN Energy Storage Optimiser (ESO) prototype which was put proudly on display at the Comms Connect Exhibition in Melbourne.
- 2017** Rebranding and reinvigorating the core product range, Power Charge was renamed Valen, meaning 'Power' in Latin.
- 2018** A Sydney office and logistics centre was opened in April to improve further the level of service offered to clients.
- 2018** The company name was changed from Regal Electro to Valen! This decision was made to strengthen the brand and recognition within the industrial battery market.
- 2020** Valen has continued to grow year on year and strengthened our position as an End-to-End solution provider for Australia and New Zealand.
- 2022** Today, Valen has grown exponentially, becoming a trusted advisor to our clients within many different industries. Valen is an industry leader in Energy Storage for mission-critical applications and continues to innovate and evolve, keeping ahead of new technologies as they emerge.



Wow Customers through Service

- Our customers want service and we want our employees to go above and beyond for our customers.



Move Fast & Remain Focused to Get Results

- We are serious about results and we must never lose focus on our goals and our sense of urgency to achieve.
- We believe in working hard and putting in extra effort to get things done.



Upbeat Positive Attitude

- If our employees have a positive attitude and constantly strive to give your best effort, eventually we will overcome our immediate problems and find you are ready for greater challenges.
- Positive and negative are directions that lead to different outcomes. We expect our employees to move in the right direction each day.



Challenge the Status Quo

- We are committed to great results and good is the enemy of great. We want our employees to embrace & drive change



Play as a Team

- Working effectively as a team creates momentum, improves morale.
- The difference between success and failure is a great team and we expect our employees to work together as a team.

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Capabilities

Valen is an end-to-end solution provider of industrial batteries and energy storage.

The team at Valen prides itself on going above and beyond by partnering with their customers to deliver an all-encompassing solution from initial system design right through to lifetime maintenance and support.

Valen has focused heavily on providing a reliable and sustainable battery energy storage solutions. However, Valen understands the complete system needs to be integrated for maximum benefits, so their exclusive range of core products include:

- + AGM, Hybrid, Gel and Lithium batteries
- + Battery Chargers
- + Battery Tester and Accessories
- + Solar Controllers and Regulators
- + Rectifiers
- + Solar Panels, Brackets and Accessories
- + Lithium Energy Storage Systems
- + Racking, Battery Enclosures & Cabinetry
- + UPS units

Valen's Complete Solution

Valen is an End-to-End Energy Solution Provider. Valen offer the complete energy storage system solution! This means Valen's customers are supplied with a complete energy solution saving time and money searching for compatible items to integrate into the system. Valen are with you every step of the way – from system design to ongoing maintenance!



Inventory Control

Valen has advanced inventory management control systems in place and a dedicated inventory control management team. Valen stocks a full range of commonly used battery sizes and configurations so customers can plan their projects with confidence, knowing they will receive faster delivery to meet project deadlines.



Collaboration

A significant part of Valen's commitment to excellence is to always work collaboratively with customers. Valen cares about it's customers and systems, which is why the team aim to provide valuable technical advice when scoping and designing projects.



Innovative Products

The team at Valen take pride in being original, so stock an exclusive range of products. These unique products and innovations ensure Valen's customers stay at the front of an ever-changing market



Technical Support

Valen's support doesn't stop once the products are supplied; with an experienced and skilled technical team, Valen assists customers after the sale. Any System or Products questions are answered promptly by Valen's in-house technical support team.



High-quality, reliable products that deliver on their promise.



Personalised Training

A qualified team of experts at Valen are readily available to provide world-class training to their customer's teams. Ensuring Valen's customers remain up to date with the latest battery technologies, safety and testing.



Product Sourcing

Valen sources its range of products from multiple regions worldwide, reducing dependence and allowing stock reliability.



Quality Control

With our in-house quality control team and state of the art facilities, Valen ensures the delivery of a unique product that meets and goes beyond expectations.



National Coverage

With warehouses located strategically, Valen offers fast and efficient delivery as well as superior service our clients have come to know and depend on.

CASE STUDY

Turnkey Solutions by Valen

Taggle

Valen Power started working with Taggle in mid-2020 to supply complete turnkey Solar Systems that could easily connect to the Taggle receivers and monitoring tools, which allowed Taggle to concentrate on their core skills whilst at the same time ensuring we have the best available industry-standard Solar power.

Situation

- Taggle provides water monitoring & weather stations to rural areas such as councils and farms and they heavily rely on solar power as the majority of their sites are remote with no main power available.
- Taggle needed a reliable and efficient solar setup, that is straightforward to install and able to be repeated at ease.
- Taggle was procuring 17x individual solar system parts from a range of suppliers creating a logistical headache with varying ETA's, backorders and freight costs

Solution

- The Valen team worked with the Taggle team to review their existing solar solution and then discuss their 'wish list' so we could design the perfect End to End Solution for their needs.
- The Valen team respecified their solar system giving them reliability in bad weather, longer autonomy and improving the longevity of the system by only working on 50% DOD of the batteries.

Outcome

- Valen's turnkey solution resulted in the design of custom kits for Taggle that had a low sun and high sun option. The kits included everything that Taggle needed to power one of their remote monitoring stations; batteries, breakers, solar panels, brackets and much more.
- This new approach streamlined procurement and the kits can be repeated with ease as it's one part code, and all coming from one supplier 'Valen'.
- Valen delivers the complete solar system directly to the Taggle site, ready for their installers to power on.



CASE STUDY

Turnkey Solutions by Valen



APA NGI

APA is embarking on a new gas pipeline infrastructure project that will connect new and existing gas provinces to existing gas pipeline infrastructure in the Northern Goldfields region of Western Australia. The project involves construction of the Northern Goldfields Interconnect (NGI), a new buried pipeline, approximately 580 kilometres long, commencing at Ambania, approximately 50 kilometres east of Geraldton, connecting into the existing Goldfields Gas Pipeline (GGP), approximately 40 kilometres south of Leinster.

The NGI will create new opportunities for the supply of natural gas for the mining industry and provide for other growth opportunities in the Goldfields region and beyond. The NGI will provide greater access to existing and new natural gas supply fields supporting the region's processing and power generation growth requirements

For more information on this project visit www.apa.com.au/about-apa/our-projects/northern-goldfields-interconnect.

Scope / Challenges

APA required four remote energy storage solutions at four locations along this 580km pipeline. The requirement was for Valen to design and supply a free-standing solar system and DC power supply equipment to suit the challenging environment of the Northern Goldfields region of Western Australia.

The solution needed to include shading against the harsh desert sun, battery boxes to support limited installation equipment and ease of ongoing maintenance, as well as remote monitoring and a battery that could be used across all sites.

Solution

The Valen Design Team hit the ground running designing and engineering a solution that met APA's requirements. Solar Frames fabricated and galvanised by local contractors supported Valen Solar panels. The design team worked with APA to produce a design for a battery box that could be lifted into position, fully loaded and wired, with the assistance of a pallet jack. The battery boxes were lockable, with top and side hinged doors, ventilation and ensured the batteries were stored 600mm off the ground to prevent damage from floods.

A purpose-built tool to aid lifting the Valen OPzV 2 Volt 800Ah batteries in and out of the battery box was designed and fabricated, enabling battery change-over to occur by a single technician.

Valen chose to use the Victron SmartEnergy 150/100 solar regulator across all sites which enabled remote monitoring and minimised tech training. All electrical cabinets were prewired prior to shipping.

Once all components were brought together on-site at Valen headquarters, the Valen quality team ensured all systems were go through a series of factory acceptance tests. These were completed in conjunction with AP representatives and ensured once the systems reached their destination it would be smooth sailing for the commissioning procedure.

CASE STUDY

Turnkey Solutions by Valen



Rio Tinto

Rio Tinto mines and produces materials that are essential for the low-carbon transition and works hard to develop innovative solutions that will help them deliver progress. That's why Valen chose to partner with Rio Tinto to help deliver a solution for one of their sites.

Situation

Rio Tinto had a site gate that required power to operate. At the time, the only option was to dig long trenches to run power lines; however, this brought cost and complexity. They were looking for an option that provided remote power without the hassle of extensive earthworks.

Due to the remoteness of the site location, the solution also needed to include remote monitoring to alert to smoke, intruders, theft and tampering, as well as shade and weather protection.

Solution

The Valen team recommended our versatile ModX4 system. Designed and developed in house, the ModX package was produced to make our customers' lives easier. Suiting a range of power requirements, the system comes complete and fully wired, giving our customers the confidence that the system will work from day 1.

Valen products were used to create the kit, including Valen Endurogel 155Ah Front Terminal Batteries, outdoor cabinet, Enetek solar controller ETS+3248 and Valen 300W Solar Panels.

Outcome

The ModX package suited Rio Tinto as it allowed remote power without the need for extensive groundwork. An additional benefit was the versatility, where Rio Tinto could request additional specs such as door locks, smoke alarms and shade screens, and installation could be anywhere that suited them.

Rio Tinto enjoys no ongoing power bills and the use of green energy. The added benefit is if the gate location was to be moved in the coming years the kit could be disassembled and reassembled at the new location.

CASE STUDY

Turnkey Solutions by Valen

Murray Irrigation

Valen Power started working with Murray Irrigation in 2018. Valen Power supplies customised Lithium batteries to support water delivery projects across approximately 3,000km of energy-efficient, gravity-fed, earthen channels to an area of almost 725,000ha.

Situation

Murray Irrigations operate over 60% of the security entitlements for the Murray River, with the majority of the sites being in remote locations the battery and battery system reliability in their monitoring sites is essential.

Due to these systems being predominantly in Northern Victoria they are subject to a range of higher temperatures; these high temperatures were affecting the life of the existing battery systems.

Another challenge faced by Murray Irrigation was that the VRLA batteries that they were using were heavy and causing WHS issues due to lifting.

Solution

Valen was asked to develop a Battery solution that would be reliable while addressing the temperature and weight challenges faced by Murray Irrigation. Valen's technical team designed a custom lithium battery in 2 sizes (12V 50Ah and 12V 75Ah) to fit Murray Irrigations existing monitoring site battery enclosures.

The life of the battery was extended as Lithium can function better in high temperatures compared to Lead Acid batteries, without excess venting and battery dry out occurring. Lithium also can cycle to a deeper depth of discharge and accepts charge faster once solar is utilised again. An internal BMS prevents the Lithium battery from over-discharging, protecting the battery.

Lithium technology was also chosen as the weight of the Lithium battery is nearly half the weight of a VRLA battery with the same capacity which helped in minimising WHS risks to Murray Irrigations technicians.

Outcome

Valen supported and supplied Murray Irrigation with Customised Lithium batteries which allowed Murray Irrigation to benefit from a safer work environment, in which their batteries are lasting longer, thus reducing the need for costly site visits.



BATTERIES

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6-12V

AGM Monobloc Batteries

Valen Topin features a rechargeable, deep cycle, Valve Regulated Lead Acid (VRLA) battery range. VRLA technology is commonly referred to as Sealed Lead Acid (SLA) as the battery electrolyte is suspended in Absorbent Glass Matting (AGM), compared to automotive-type batteries where the electrolyte is loose. This construction ensures that the Valen Topin battery range is robust, safe and maintenance-free.

Most importantly, the Valen Topin Monobloc battery range holds the CSIRO ActivFire SSL Approval and complies with AS4029.2, making it the battery of choice for the Fire industry. In addition, stringent quality-controlled manufacturing and in-house testing allow the Valen Topin to deliver an 8-year design life in standby applications.



Applications include:



Diesel
Genset



Fire



UPS



Security



Road
Signage



Automatic
Gates



Lifts &
Elevators



Features

Premium (Valve Regulated Lead Acid) VRLA Design

Valen Topin battery range is able to be installed and operated in any position (except inverted), making it an attractive option for less accessible areas.

Maintenance-Free Design

Minimises technician time spent at site and on battery related callouts.

SSL Approval

CSIRO certified for use in the Fire industry (AS 1603.4 Appendix G-1987) ActivFire Certificate: afp-1668.

FAA and IATA Approved

Valen Topin battery range is safe for air transportation.



Specifications

Voltage	6 & 12 Volt nominal
Plates	Heavy Duty
Container	ABS Plastic
Charge Voltage	6V Cycle: 7.2-7.5V at 25°C 6V Float: 6.75-6.9V at 25°C 12V Cycle: 14.4-15.0V at 25°C 12V Float: 13.5-13.8V at 25°C
Design Life	8-years
Electrolyte	Sulphuric Acid
Vent	Self-sealing
Operating Temp*	-20°C to +60°C

*However Valen recommend the Topin batteries be operated in the temperature range of 20°C to 30°C to obtain full life and optimum performance.

6-12V AGM Monobloc Batteries

Product Code	Nom. Cap C/20	Nom. Cap C/10	Terminal ^	Dimensions (mm)			Weight (Kg)	CCA at 0°	Stocked Item
				L	W	H			
6TP1.3	1.3	1.21	F1	97	25	52	0.297		✓
6TP3.3	3.3	3.01	F1	134	34	59	0.670		✓
6TP5	5.0	4.76	F1	70	47	102	0.830		✓
6TP7	7.0	6.65	F1	151	34	94	1.2		✓
6TP12	12.6	12.0	F1	151	50	94	1.8		–
12TP1.3	1.3	1.21	F1	97	43	53	0.564		✓
12TP2.2	2.3	2.22	F1	178	34	60	1.04		✓
12TP2.3	2.3	2.1	Flat Plate	182	24	61	0.71		✓
12TP2.9F1	2.9	2.83	F1	79	56	99	1.19		✓
12TP3.3	3.3	3.01	F1	134	67	59.5	1.3		✓
12TP5F1	5.6	5.14	F1	90	70	101	1.9		✓
12TP5F2	5.6	5.14	F2	90	70	101	1.9		✓
12TP7	7.0	6.82	F1	151	65	94	2.2		✓
12TP9	9.0	8.55	F2	151	65	94	2.7		✓
12TP12F2	12.4	12.0	F2	151	98	93	3.75		✓
12TP21	23.0	22.1	M5	181	76	167	6.9	205	✓
12TP26	27.0	26.5	M5	166	175	125	9.3	265	✓
12TP30	30.0	27.0	M5	166	126	176	9.3	390	✓
12TP33	33	31.5	M5	197	131	159	9.9	320	✓
12TP40	43.0	41.0	M6	199	166	171	13.4	350	✓
12TP55	58.0	56.0	M6	226	135	207	17	380	✓
12TP65	67	65.0	M6	350	167	179	20.9	490	✓
12TP70	79.0	76.0	M6	260	170	202	24.2	550	✓
12TP90	106	101	M6	307	168	208	29.5	680	✓
12TP100	104.4	103	M8	329.5	172.3	215	31.3	780	✓
12TP120	126	120	M6	338	170	212	32.5	960	✓
12TP150	151.2	151	M8	483	170	240	46	1300	✓
12TP200	212	201	M8	522	238	219	61.5	1440	✓
12TP250	260	251	M8	521	269	220	72.8	1880	✓

^ See page 110 for reference.

12V

Advanced AGM Monobloc Batteries

Valen X-CEL range features a deep cycle, rechargeable, Valve Regulated Lead Acid (VRLA) battery. Based on Absorbent Glass Matting (AGM) construction, the Valen X-CEL range is a safe and maintenance-free battery solution while carrying additional advantages associated with X-CEL technology.

Unique high purity virgin lead plates incorporating 1.6% tin reduce battery sulphation and plate delamination, substantially extending the battery's life. Thanks to its technologically advanced construction, the Valen X-CEL 6-12V range proudly offers 10-year design life, making it ideal for use in critical standby applications.



Applications include:



UPS



Security



Comms



Hospitals
& Medical



Datacentre



Automatic
Gates



Lifts &
Elevators



Telemetry



Features

Premium (Valve Regulated Lead Acid) VRLA Design

Valen X-CEL battery range is able to be installed and operated in any position (except inverted) making it an attractive option for less accessible areas.

Maintenance-Free Design

Minimises technician time spent at site and on battery related callouts

Advanced X-CEL Technology

High purity virgin lead plates, including the unique tin formula, gives the Valen X-CEL a 10-year standby design life.

FAA and IATA Approved

Valen X-CEL battery range is safe for air transportation.



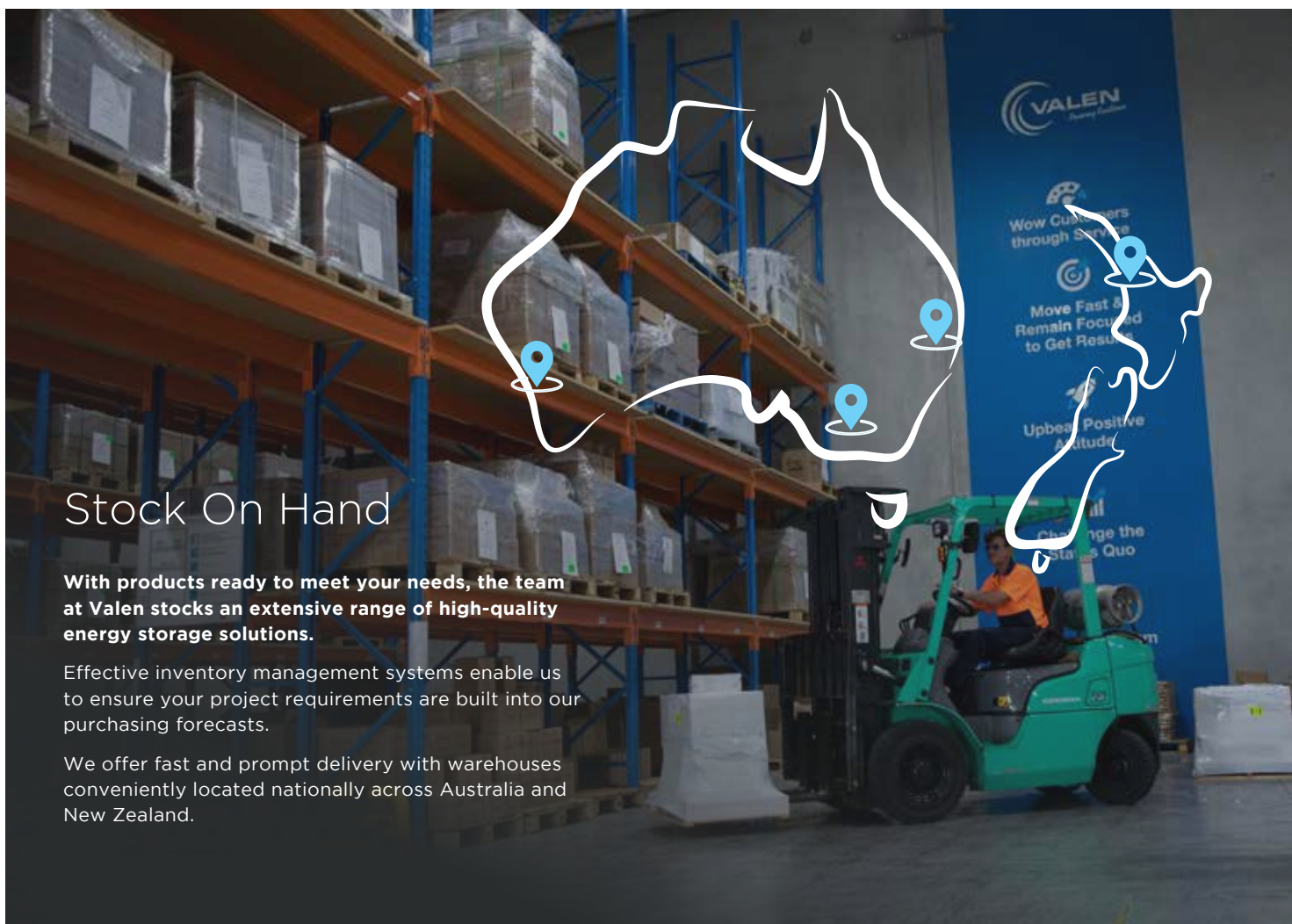
Specifications

Voltage	12 Volt nominal
Plates	Virgin pure lead/ 1.6% tin grid alloy
Container	ABS Plastic
Charge Voltage	Cycle: 14.4-14.7V at 25°C Float: 13.2-13.8V at 25°C
Design Life	10-years
Electrolyte	Sulphuric Acid
Vent	Self-sealing
Operating Temp*	-20°C to +60°C

*However Valen recommend the X-CEL batteries be operated in the temperature range of 20°C to 30°C to obtain full life and optimum performance.

12V Advanced AGM Monobloc Batteries

Product Code	Nom. Cap C/20	Nom. Cap C/10	Terminal ^	Dimensions (mm)			Weight (Kg)	Stocked Item
				L	W	H		
12VX9	9	8.2	F2	151	65	94	2.9	✓
12VX14	12	11.8	F2	151	98	95	4.0	✓
12VX21	17	16.9	M5	181	77	167	5.9	✓
12VX33	34.6	33.1	M6	195	130	155	11.2	✓
12VX40	42	40.7	M6	197.5	165.5	170	14.7	✓
12VX100	105	103	M8	330	171	220	32	–
12VX260	262	252	M8	520	269	221	74	✓



Stock On Hand

With products ready to meet your needs, the team at Valen stocks an extensive range of high-quality energy storage solutions.

Effective inventory management systems enable us to ensure your project requirements are built into our purchasing forecasts.

We offer fast and prompt delivery with warehouses conveniently located nationally across Australia and New Zealand.

VALEN
Powering Australia

Wow Customers through Service

Move Fast & Remain Focused to Get Results

Uplift Positive Attitude

Change the Status Quo

^ See page 110 for reference.

12V

Hybrid Monobloc Batteries

Welcome to one of the newest products of the Valen battery range!

Valen Forte battery range features a Hybrid Gel Valve Regulated Lead Acid (VRLA) battery that is rechargeable, deep cycle and maintenance-free. Valen Forte's construction is based on the Absorbed Glass Matting (AGM) technology; this Hybrid Gel battery utilises a combination of AGM separators with liquid Gel Colloidal Silica electrolyte. Valen Forte battery technology gives you the best of both worlds, delivering the advantage of increased cycle life similar to that of a Gel battery, with the lower cost advantage of an AGM battery.



Applications include:



Hospitals
& Medical



Floor
Scrubber



Mobility



Road
Signage



Golf & Electric
Vehicles



Features

Premium (Valve Regulated Lead Acid) VRLA Design

Valen Forte battery range is able to be installed and operated in any position (except inverted) making it an attractive option for less accessible areas.

Maintenance-Free Design

Minimises technician time spent at site and on battery, related callouts

Advanced Hybrid Silica Electrolyte Design

Offers improved cyclic life over a standard AGM battery, whilst maintaining faster current delivery, lower cost and a 10-year design life.

FAA and IATA Approved

Valen Forte battery range is safe for air transportation.



Specifications

Voltage	12 Volt nominal
Plates	Heavy Duty
Container	ABS Plastic
Charge Voltage	Cycle: 13.8-14.5V at 25°C Float: 13.5-13.8V at 25°C
Design Life	10-years
Electrolyte	Sulphuric Acid
Vent	Self-sealing
Operating Temp*	-20°C to +60°C

*However Valen recommend the Forte batteries be operated in the temperature range of 20°C to 30°C to obtain full life and optimum performance.

12V Hybrid Monobloc Batteries

Product Code	Nom. Cap C/20	Nom. Cap C/10	Terminal ^	Dimensions (mm)			Weight (Kg)	Stocked Item
				L	W	H		
12VF20	20	19.3	M6	181	76	167	6.7	✓
12VF33	34.2	32.7	M6	197	131	159	10.7	✓
12VF40	40	38	M6	198	166	171	13.3	✓
12VF50	50	47.5	M6	199	166	171	15.3	✓
12VF55	56.2	54.2	M6	226	135	214	17	✓
12VF70	75.6	72.6	M6	260	170	207	24.8	✓
12VF100	103	101	M8	338	170	217	34	✓

Exceptional Customer Service

Valen's core value to WOW customers through service is that we go above and beyond for our clients throughout every interaction.

This service starts from the initial enquiry, product support, invoicing and delivery, all the way through to after-sales support. You can expect to power excellence with Valen!

^ See page 110 for reference.



6-12V

Gel Monobloc Batteries

Valen Gel range features a rechargeable, deep cycle, Valve Regulated Lead Acid (VRLA) battery. Gel technology varies from its AGM counterpart because the electrolyte is suspended in Thixotropic Silica Gel, unlike the AGM batteries where the electrolyte is suspended in the Absorbent Glass Mat. Genuine Gel technology gives the Valen Gel range an edge over its competition by extending the battery's longevity and minimising the number of cycles required to reach its full capacity.

The Valen Gel battery range made in the UAE has met and exceeded all market expectations over the years and continues to prove its excellence thanks to its ability to resist deep discharges and recover after heavy draining. In addition, stringent quality controlled manufacturing, and in-house testing allows the Valen Gel battery to deliver a 10-year design life and can be the economical battery of choice in cyclic applications.



Applications include:



Hospitals
& Medical



Floor
Scrubber



Mobility



Road
Signage



Golf & Electric
Vehicles



Comms



Solar



Mining



Telemetry



Features

Premium (Valve Regulated Lead Acid) VRLA Design

Valen GEL battery range is able to be installed and operated in any position (except inverted) making it an attractive option for less accessible areas.

Maintenance-Free Design

Minimises technician time spent at site and on battery related callouts.

Advanced Thixotropic Silica Gelled Electrolyte

Genuine Gel separators and quality lead plates made in the UAE allow the Valen GEL battery range to offer a 10-year design life.

FAA and IATA Approved

Valen GEL battery range is safe for air transportation.



Specifications

Voltage	6 & 12 Volt nominal
Plates	Heavy Duty
Container	ABS Plastic
Charge Voltage	6V Cycle: 7.2-7.5V at 25°C 6V Float: 6.75-6.9V at 25°C 12V Cycle: 14.1-14.4V at 25°C 12V Float: 13.5-13.8V at 25°C
Design Life	10-years
Electrolyte	Thixotropic Gel - Sulphuric Acid
Vent	Self-sealing
Operating Temp*	-20°C to +60°C

*However Valen recommend the GEL batteries be operated in the temperature range of 20°C to 30°C to obtain full life and optimum performance.

6-12V Gel Monobloc Batteries

Product Code	Nom. Cap C/20	Nom. Cap C/10	Terminal ^	Dimensions (mm)			Weight (Kg)	Stocked Item
				L	W	H		
6VG225	220	210	M8	243	188	275	32	✓
12VG21	18	16.7	M5	181.5	77	167.5	5.8	✓
12VG26	26	23.1	M6	165	125	175	8.7	✓
12VG33	33	30.6	M6	195	130	158	10.2	✓
12VG40	40	37	M6	197	165	170	13.5	✓
12VG55	55	50.9	M6	229	138	211	16.6	✓
12VG60	60.8	56.2	M6	254	168	177	21.5	✓
12VG70	70	64.8	M6	254	168	205.4	25	✓
12VG100	100	92.6	M6	330	173	218	31	✓

Training & Support

How well does your team know batteries, solar or the correct maintenance procedures?

Valen offers exceptional training and support to ensure your team is qualified and up-skilled in installing and maintaining energy storage systems. Training is customised to each client and their systems to provide real value and essential relevant knowledge.

Contact us now on the below details to get your team upskilled!

^ See page 110 for reference.

6-12V

Gel Monobloc Batteries with Catalyst

Valen ENDUROGEL range features a rechargeable, deep cycle, Valve Regulated Lead Acid (VRLA) battery. In addition, genuine Gel technology allows this battery range to offer the cyclic benefits of the Valen Gel range.

However, the Valen ENDUROGEL battery range outshines the standard Gel battery by incorporating both advanced lead plates and the Catalyst.

High purity virgin lead plates with 1.6% tin extend the longevity of the Valen ENDUROGEL battery. In addition, including the unique Catalyst Life Extender reduces sulphation and delamination by substantially lowering the rate of battery dry-out. This innovative combination allows the Valen ENDUROGEL a design life of 12 years and is ideal for use in mission-critical cyclic applications.



Applications include:



Hospitals
& Medical



Datacentre



Automatic
Gates



Mobility



Road
Signage



Rail



Comms



Solar



Mining



Telemetry



Features

Premium (Valve Regulated Lead Acid) VRLA Design

Valen ENDUROGEL battery range is able to be installed and operated in any position (except inverted) making it an attractive option for less accessible areas.

Maintenance-Free Design

Minimises technician time spent at site and on battery related callouts.

Advanced ENDUROGEL Technology

Thixotropic Gelled electrolyte, genuine Gel separators, quality lead plate, and a Catalyst Life Extender allow the Valen ENDUROGEL range to offer a 12-year design life.

Unique Catalyst Life Extender

Prevents battery dry out allowing the Valen ENDUROGEL range to become the battery of choice for mission-critical cyclic applications.

FAA and IATA Approved

Valen ENDUROGEL battery range is safe for air transportation.



Specifications

Voltage	6 & 12 Volt nominal
Plates	Heavy Duty
Container	ABS Plastic
Charge Voltage	6V Cycle: 7.05-7.2V at 25°C 6V Float: 6.75-6.9V at 25°C 12V Cycle: 14.1-14.4V at 25°C 12V Float: 13.5-13.8V at 25°C
Design Life	12-years
Electrolyte	Thixotropic Gel, Sulphuric Acid
Vent	Self-sealing
Operating Temp*	-20°C to +60°C

*However Valen recommend the ENDUROGEL batteries be operated in the temperature range of 20°C to 30°C to obtain full life and optimum performance.

6-12V Gel Monobloc Batteries with Catalyst

Product Code	Nom. Cap C/100	Nom. Cap C/20	Nom. Cap C/10	Terminal ^	Dimensions (mm)			Weight (Kg)	Stocked Item
					L	W	H		
6EG260	260	230	204	M8	243	187	276	35	✓
12EG50	50	40	37	M6	197	165	170	14	✓
12EG60	60	55	50.9	M6	229	138	208	18	✓
12EG80	80	70	64.8	M6	260	168	215	24	✓
12EG110	110	100	92.6	M6	330	171	214	34	✓
12EG170	170	150	139	M8	485	172	240	44	✓
12EG220	220	200	185	M8	522	238	222	65	✓
12EG300	300	250	231	M8	521	269	220	80.5	✓

Catalyst Life Extender

During the charge and discharge cycle of all Lead Acid batteries, hydrogen and oxygen are released through the battery's vents. This chemical reaction can cause the battery to become sulphated, and the battery plates depolarise over time.

With Valen's exclusive Catalyst Life Extender installed in the headspace of the battery, gases are recombined to deliver benefits such as:

- **Lengthened battery design life**
- **Reduced cell failure due to sulphation**
- **Extended battery float service life due to reduced plate corrosion**
- **Maintains full design life when used at temperatures up to 30°C**
- **Reduces the possibility of thermal runaway**



^ See page 110 for reference.

12-24V

Lithium Monobloc Batteries

Valen ENLiFEN range features a Lithium Phosphate (LiFe PO4) battery constructed utilising individual 3.2V3200mAh cells in series and parallel. These Lithium cells are controlled by the Valen ENLiFEN Battery Management System (BMS). Customised BMS allows the Valen ENLiFEN battery to perform safely without the fear of thermal runaway and explosion. Another crucial feature of the Valen ENLiFEN BMS is to equalise all individual Lithium cells in the battery, ensuring longevity.

Customisation ensures the Valen ENLiFEN battery range can be retrofitted into a range of restrictive space areas. Thanks to the Valen ENLiFEN ranges flexibility, BMS and proven ability to withstand high temperatures; it has become the battery of choice for remote, space restrictive and hot environments such as monitoring equipment and signage



Applications include:



Features

Superior Life

Valen ENLiFEN battery range offers superior life with an expectancy of 6 to 10 times more than standard AGM batteries.

Lighter Weight

Up to two-thirds lighter in weight than standard AGM batteries.

Safer

Safer battery option as the customised built-in Valen ENLiFEN BMS prevents short circuit, over-voltage and over-discharge, as well as thermal runaway.

Flexible

Customisation allows the Valen ENLiFEN to be fitted into areas standard VRLA batteries cannot be utilised due to size restrictions.

Maintenance-Free Design

Maintenance free battery range dramatically reduces time spent on site for battery related issues.

Specifications

Voltage	12 & 24 Volt nominal
Cells	Cylindrical 3.2V3200mAh
Charge Voltage	Cycle 14.4V at 25°C Cycle 28.8V at 25°C Constant Voltage
Operating Temp*	-20°C to +60°C

*However Valen recommend the ENLiFEN batteries be operated in the temperature range of 20°C to 30°C to obtain full life and optimum performance.

12-24V Lithium (LiFe PO4) Monobloc Batteries

Product Code	Nom. Cap (25°C)	Terminal ^	Dimensions (mm)			Weight (Kg)	Stocked Item
			L	W	H		
12EL0109	10Ah	F2	151	65	94	1.4	✓
12EL02012	20Ah	F2	151	98	94	2.5	✓
12EL03021	30Ah	M5	181	76	167	4.3	✓
12EL04033	40Ah	M6	194	132	173	5	✓
12EL07255	72Ah	M6	197	161	149	9.5	✓
12EL10070	100Ah	M8	260	170	207	13	✓
12EL150100	150Ah	M8	307	172	215	19.5	✓
12EL240150	240Ah	M8	480	170	240	31.2	✓
12EL350200	350Ah	M8	530	266	215	45.5	✓
24EL03040	30Ah	M6	197	165	170	8.5	✓
24EL100150	100Ah	M8	530	266	215	26.8	✓

Valen ENLiFEN Lithium Customisation

Valen ENLiFEN Lithium batteries are able to be customised to your application.

The Battery Management System (BMS) is programmed based on the systems voltage, constant discharge current, peak discharge current, rate of charge, method of charge, and any space or sizing requirements.

To add flexibility, the batteries are able to be shrink-wrapped, mounted in an aluminium enclosure or a standard VRLA battery casing. Aluminium casing is available with a variety of anderson connectors and additional handles based on your requirements.

Other features are available on request including thermo monitoring and software interactive monitoring.

Call the team today to discuss your requirements.



^ See page 110 for reference.

12V

Lithium Front Terminal

Valen ENLiFEN range features a Lithium Phosphate (LiFe PO₄) battery constructed utilising individual 3.2V3200mAh cells in series and parallel. These Lithium cells are controlled by the Valen ENLiFEN Battery Management System (BMS). Customised BMS allows the Valen ENLiFEN battery to perform safely without the fear of thermal runaway and explosion. Another crucial feature of the Valen ENLiFEN BMS is to equalise all individual Lithium cells in the battery, ensuring longevity.

Customisation ensures the Valen ENLiFEN battery range can be retrofitted into a range of restrictive space areas. Thanks to the Valen ENLiFEN ranges flexibility, BMS and proven ability to withstand high temperatures; it has become the battery of choice for remote, space restrictive and hot environments such as monitoring equipment and signage



Applications include:



UPS



Comms



Datacentre



Mining



Rail



Features

Superior Life

Valen ENLiFEN battery range offers superior life with an expectancy of 6 to 10 times more than standard AGM batteries.

Lighter Weight

Up to two-thirds lighter in weight than standard AGM batteries.

Safer

Safer battery option as the customised built-in Valen ENLiFEN BMS prevents short circuit, over-voltage and over-discharge, as well as thermal runaway.

Flexible

Customisation allows the Valen ENLiFEN to be fitted into areas standard VRLA batteries cannot be utilised due to size restrictions.

Maintenance-Free Design

Maintenance free battery range dramatically reduces time spent on site for battery related issues.

Supplied with Battery Link Kits

Valen supply battery link kits to ensure your system installation is hassle-free! These system links work in with Valen's standard battery racking.



Specifications

Voltage	12 Volt nominal
Cells	Cylindrical 3.2V3200mAh
Charge Voltage	Cycle 14.4V at 25°C Cycle 28.8V at 25°C Constant Voltage
Operating Temp*	-20°C to +60°C

*However Valen recommend the ENLiFEN batteries be operated in the temperature range of 20°C to 30°C to obtain full life and optimum performance.

Customised battery racking and cabinetry available on request (page 102). For more details call the team today.

12V Advanced AGM Front Terminal

Product Code	Nom. Cap C/10	Nom. Cap C/5	Terminal ^	Dimensions (mm)			Weight (Kg)	Stocked Item
				L	W	H		
12ELFT125100	105	95	M8	552	110	240	13	✓

Front Terminal Battery Racking

The Valen Front Terminal Substation Certified Seismic Racks are in stock and ready to ship!

The racks are designed for both solar or backup powered sites for 110V, 48V and 24V systems.

The racks are Seismic rated as per the following certifications;

- IEEE 693-2018 – IEEE Recommended Practice for Seismic Design of substations
- AS/NZS1170.0:2002 Structural Design Actions: General Principles
- AS/NZS1170.1:2002 Structural Design Actions: Permanent, Imposed and Other Actions
- NZS1170.5:2004 Structural Design Actions: Earthquake Actions – New Zealand
- AS 4100:2020 Steel Structures Code

The Seismic racks are flat packed for easy freight to site and easy to assemble. The kit includes instructions and everything you need to build the racks to standard.



^ See page 110 for reference.

12V

Carbon Front Terminal

Valen ENVIROX-CEL Front Terminal range features a rechargeable, deep cycle, Valve Regulated Lead Acid (VRLA) battery. The Valen ENVIROX-CEL battery construction is based on the Absorbent Glass Matting (AGM) safe and maintenance-free technology. However, the Valen ENVIROX-CEL is manufactured with unique high purity virgin lead plates, incorporating calcium, allowing for an extremely long float life performance.

Valen ENVIROX-CEL Front Terminal's slimline design allows it to be retrofitted into 19-inch racking for a compact and effective battery system. A narrow profile with the terminals across the front means the terminals are easily accessed for both installation and maintenance. These Front Terminal batteries have the capability to be exteriorly ventilated with optional ventilation tubing available. Stringent quality controlled manufacturing and in-house testing enables the Valen ENVIROX-CEL Front Terminal battery range to deliver a 12-year design life.



Applications include:



UPS



Comms



Datacentre



Mining



Rail



Features

Premium (Valve Regulated Lead Acid) VRLA Design

Valen ENVIROX-CEL battery range is able to be installed and operated in any position (except inverted) making it an attractive option for less accessible areas.

Maintenance-Free Design

Minimises technician time spent at site and on battery related callouts.

Advanced Carbon Design

Valen ENVIROX-CEL's inclusion of Carbon allows for an extremely long float life performance with a 12-year standby design life.

Specialised Valen Front Terminal Design

Includes terminal protection cover, insulated intercell links, ventilation holes for optional external venting, as well as being designed for easy installation into 19-inch racks.

FAA and IATA Approved

Valen ENVIROX-CEL battery range is safe for air transportation.

Supplied with Battery Link Kits

Valen supply battery link kits to ensure your system installation is hassle-free! These system links work in with Valen's standard battery racking.



Specifications

Voltage	12 Volt nominal
Plates	Virgin pure lead/ Lead-Calcium-Tin-Alloy
Container	ABS Plastic
Charge Voltage	Cycle: 14.4V at 25°C Float: 13.62V at 25°C
Design Life	12-years
Electrolyte	Sulphuric Acid
Vent	Self-sealing
Operating Temp*	-20°C to +60°C*

*However Valen recommend the ENVIROX-CEL batteries be operated in the temperature range of 20°C to 30°C to obtain full life and optimum performance.

Customised battery racking and cabinetry available on request (page 102). For more details call the team today.

12V Carbon Front Terminal

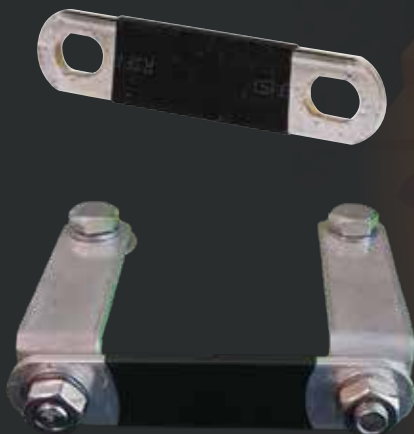
Product Code	Nom. Cap C/10	Nom. Cap C/5	Terminal ^	Dimensions (mm)			Weight (Kg)	Stocked Item
				L	W	H		
12EOFT100	101	88	M8	398	110	286	33.2	✓
12 EOFT 155	157	136	M8	550	110	285	49.0	✓
12 EOFT 190	192	167	M8	555	125	316	61	–

Battery Links

Valen supply battery link kits to ensure your system installation is hassle-free! These system links work in with Valen's standard battery racking.

Battery links can be found on page 41.

We understand that there is not always one fix, so ask us about customised links!



^ See page 110 for reference.

12V

Gel Front Terminal with Catalyst

Valen ENDUROGEL range features a rechargeable, deep cycle, Valve Regulated Lead Acid (VRLA) battery. Genuine Gel technology allows this battery range to offer the cyclic benefits of the Valen Gel range.

However, the Valen ENDUROGEL range outshines the standard Gel battery by incorporating both advanced lead plates and the Catalyst.

High purity virgin lead plates with 1.6% tin extend the longevity of the Valen ENDUROGEL battery. Inclusion of the unique Catalyst Life Extender reduces sulphation and delamination while substantially preventing battery dry out.

Valen Front Terminal's slimline design allows the battery to be retrofitted into 19-inch racking for a compact and effective battery system. Stringent quality controlled manufacturing and in-house testing gives the Valen ENDUROGEL Front Terminal range the ability to deliver a 15-year design life, as well as being the Front Terminal battery of choice in mission-critical cyclic applications.



Applications include:



UPS



Comms



Datacentre



Mining



Rail



Solar



Features

Premium (Valve Regulated Lead Acid) VRLA Design

Valen ENDUROGEL battery range is able to be installed and operated in any position (except inverted) making it an attractive option for less accessible areas.

Maintenance-Free Design

Minimises technician time spent at site and on battery related callouts.

Advanced ENDUROGEL Technology

Thixotropic Gelled electrolyte, genuine Gel separators, quality lead plates and a Catalyst Life Extender allow the Valen ENDUROGEL range to offer a 15-year design life.

Specialised Valen Front Terminal Design

Includes terminal protection cover, insulated intercell links, ventilation holes for optional external venting, as well as being designed for easy installation into 19-inch racks.

Unique Catalyst Life Extender

Prevents battery dry out allowing the Valen ENDUROGEL range to become the battery of choice for mission-critical cyclic applications.

FAA and IATA Approved

Valen ENDUROGEL battery range is safe for air transportation.

Supplied with Battery Link Kits

Valen supply battery link kits to ensure your system installation is hassle-free! These system links work in with Valen's standard battery racking.



Specifications

Voltage	12 Volt nominal
Plates	Heavy Duty
Container	ABS Plastic
Charge Voltage	Cycle: 14.4-15.0V at 25°C Float: 13.5-13.8V at 25°C
Design Life	15-years
Electrolyte	Thixotropic Gel Sulphuric Acid
Vent	Self-sealing
Operating Temp*	-20°C to +60°C*

*However Valen recommend the ENDUROGEL batteries be operated in the temperature range of 20°C to 30°C to obtain full life and optimum performance.

Customised battery racking and cabinetry available on request (page 102). For more details call the team today.

12V Gel Front Terminal with Catalyst

Product Code	Nom. Cap C/10	Nom. Cap C/5	Terminal [^]	Dimensions (mm)			Weight (Kg)	Stocked Item
				L	W	H		
12EGFT100	95.2	83	M8	395	110	286	34	✓
12EGFT155	156	135.5	M8	550	110	288	50	✓



How well are your batteries performing?

Valen's full range of battery testers ensures there is a way of finding out just how reliable your battery system is!

We stock quick indicative battery testers for onsite inspections, cyclic discharge load testers for accurate analytical tests and reporting, or impedance testers with the software for online storage and reporting.

See page 66 to go through Valen's full range of battery testers.

[^] See page 110 for reference.

12V

Advanced Carbon Front Terminal

Valen ENVIROX-CELPlus range features a rechargeable, deep cycle, Valve Regulated Lead Acid (VRLA) battery. Advanced Graphitic Carbon and Carbon Black Blend in the active material allow the ENVIROX-CELPlus to recharge faster, increasing the batteries efficiency for operation in harsh environments.

Valen ENVIROX-CELPlus range made in the UAE is designed for endurance in higher temperature standby environments of up to 65°C. Shock resistant and flame retardant casing have been utilised in the construction of the Valen ENVIROX-CELPlus battery to increase its resistance to the outside temperatures.

Valen Front Terminal's slimline design allows the battery to be retrofitted into 19-inch racking for a compact and effective battery system. Stringent quality controlled manufacturing and in-house testing gives the Valen ENVIROX-CELPlus Front Terminal range the ability to deliver a 15-year design life, as well as being the Front Terminal battery of choice for critical standby applications or sites with an unstable grid.



Applications include:



UPS



Comms



Datacentre



Mining



Rail



Solar



Features

Premium (Valve Regulated Lead Acid) VRLA Design

Valen ENVIROX-CELPlus battery range is able to be installed and operated in any position (except inverted) making it an attractive option for less accessible areas.

Maintenance-Free Design

Minimises technician time spent at site and on battery related callouts.

Advanced Carbon Design

Valen ENVIROX-CELPlus's inclusion of Carbon allows for an extremely long float life performance with a 15-year standby design life.

Specialised Valen Front Terminal Design

Includes terminal protection cover, insulated intercell links, ventilation holes for optional external venting, as well as being designed for easy installation into 19-inch racks.

FAA and IATA Approved

Valen ENVIROX-CELPlus battery range is safe for a ir transportation.

Supplied with Battery Link Kits

Valen supply battery link kits to ensure your system installation is hassle-free! These system links work in with Valen's standard battery racking.



Specifications

Voltage 12 Volt nominal

Plates Virgin pure lead/
Lead-Calcium-Tin Alloy

Container ABS Plastic

Charge Voltage Cycle: 14.4V at 25°C
Float: 13.62V at 25°C

Design Life 15-years

Electrolyte Sulphuric Acid

Vent Self-sealing

Operating Temp* -20°C to +65°C*

*However Valen recommend the ENVIROX-CELPlus batteries be operated in the temperature range of 20°C to 30°C to obtain full life and optimum performance.

Customised battery racking and cabinetry available on request (page 102). For more details call the team today.

12V Advanced Carbon Front Terminal

Product Code	Nom. Cap C/10	Nom. Cap C/5	Terminal ^	Dimensions (mm)			Weight (Kg)	Stocked Item
				L	W	H		
12EO+FT100	104	90.5	M8	398	110	286	33.2	✓
12EO+FT150	152	132	M8	550	110	288	50.0	–
12EO+FT190	192	167	M8	557	125	316	62.0	✓

Exterior Ventilation Tubing

In some cases, external ventilation of battery systems is required.

External ventilation may be needed to reduce internal fumes and the detrimental effect that they can have on electrical equipment such as switchboards. That's why Valen's Front Terminal ranges all come with optional Battery Ventilation Tubing.

Reach out to us to exteriorly ventilate your next Front Terminal Battery project!

^ See page 110 for reference.

2V

Gel Batteries with Catalyst

Valen ENDUROGEL 2V range features a rechargeable, deep cycle, Valve Regulated Lead Acid (VRLA) battery. Genuine Gel technology allows this range to offer the cyclic benefits of the Valen Gel battery range.

However, the Valen ENDUROGEL range outshines the standard Gel battery by incorporating both advanced lead plates and the Catalyst.

High purity virgin lead plates with 1.6% tin extend the longevity of the Valen ENDUROGEL battery. In addition, the inclusion of the unique Catalyst Life Extender reduces sulphation and delamination while substantially preventing battery dry-out.

The Valen ENDUROGEL 2V range configuration allows for safe and secure installation and maintenance, especially in higher-capacity cyclic power systems. In addition, stringent quality controlled manufacturing, and in-house testing gives the Valen ENDUROGEL 2V battery the ability to deliver a 20-year design life, as well as being the 2V battery of choice in demanding cyclic applications.



Applications include:



UPS



Comms



Datacentre



Mining



Rail



Solar



Features

Premium Valve Regulated Lead Acid (VRLA) Design

Valen Gel battery range is able to be installed and operated in any position (except inverted) making it an attractive option for less accessible areas.

Maintenance-Free Design

Minimises technician time spent at site and on battery related callouts.

Advanced ENDUROGEL Technology

Thixotropic Gelled electrolyte, genuine Gel separators, quality lead plates, and a Catalyst Life Extender allow the Valen ENDUROGEL range to offer a 15-year design life.

Unique Catalyst Life Extender

Prevents battery dry out allowing the Valen ENDUROGEL range to become the battery of choice for mission-critical cyclic applications.

Specialised Valen 2V Design

Includes a protective terminal cover as well as insulated intercell links.

Racking Available

Standard (pg 89) and Modular (pg 85) racking is available. Valen provides customised racking ensuring that there is always a solution to fit your site.

FAA and IATA Approved

Valen ENDUROGEL battery range is safe for air transportation.



Specifications

Voltage	2 Volt nominal
Plates	Heavy Duty
Container	ABS Plastic
Charge Voltage	Cycle: 2.40-2.45V at 25°C Float: 2.20-2.30V at 25°C
Design Life	20-years
Electrolyte	Thixotropic Gel Sulphuric Acid
Vent	Self-sealing
Operating Temp*	-20°C to +60°C*

*However Valen recommend the ENDUROGEL batteries be operated in the temperature range of 20°C to 30°C to obtain full life and optimum performance.

Product Code	Nom. Cap C/10	Terminal ^	Dimensions (mm)			Weight (Kg)	Stocked Item
			L	W	H		
2EG500	512	M8	242	173	330	38.8	✓
2EG1000	1010	M8	475	175	330	69.2	✓

Efficient System Design

At Valen, we pride ourselves on being a life system support to our clients. The team at Valen are here to work with you throughout the life of your project; design, supply, installation, commissioning, maintenance and follow-up support.

Valen's capabilities to offer a complete, efficient system design include:

- **High-quality, reliable products that deliver on their promise**
- **Advanced inventory management control**
- **Expert technical advice**
- **On-time, lower-cost supply**
- **Ongoing support and on-site training**

Work with the team at Valen to help guide you through the complete process.

^ See page 110 for reference.

2V

Gel Batteries with Sliding Pole

Valen OPzV battery range features a tubular plated Gel battery. Like all Valen's battery ranges, the OPzV battery range is rechargeable, deep cycle and maintenance-free.

The Valen OPzV battery range has several advantages compared to standard OPzV batteries, the most significant being the sliding pole technology. This innovation allows the pole terminal to move with positive plate growth preventing case rupture and ultimately extending the battery life.

Thanks to the sliding pole technology, state-of-the-art certified manufacturing lines, and cyclic gel electrolyte, the Valen OPzV range offers a design life of 18 years, making it ideal for mission-critical cyclic applications.



Applications include:



UPS



Comms



Datacentre



Mining



Rail



Solar



Features

Premium Valve Regulated Lead Acid (VRLA) Design

Valen OPzV battery range is able to be installed and operated in any position (except inverted) making it an attractive option for less accessible areas.

Maintenance-Free Design

Minimises technician time spent at site and on battery related callouts.

Advanced Tubular Gel Technology

Tubular positive plate construction provides reliability and long service life, whilst the negative plate grid design is constructed using lead calcium tin alloy. Both of these advanced features allow for excellent cyclic and deep discharge performances and a design life of 18 years in standby applications.

Specialised OPzV Sliding Pole Design

Specifically designed sliding pole technology minimised the risk of case rupture from positive pole growth; these poles have been designed with high current applications in mind.

Specialised Valen 2V Design

Includes a protective terminal cover as well as insulated intercell links.

IATA Approved

Valen OPzV battery range is safe for air transportation.



Specifications

Voltage	2 Volt nominal
Plates	Lead Calcium Tin Alloy
Container	ABS Plastic
Charge Voltage	Cycle: 2.35V at 25°C Float: 2.25V at 25°C
Design Life	18-years
Electrolyte	Thixotropic Gel Sulphuric Acid
Vent	Self-sealing
Operating Temp*	-20°C to +60°C*

*However Valen recommend the OPzV batteries be operated in the temperature range of 20°C to 30°C to obtain full life and optimum performance.

2V Gel Cells with Sliding Pole Technology

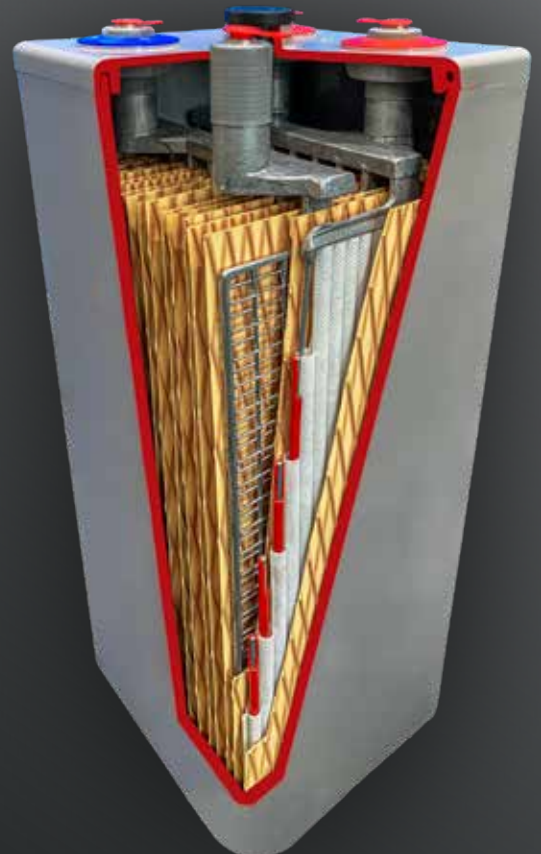
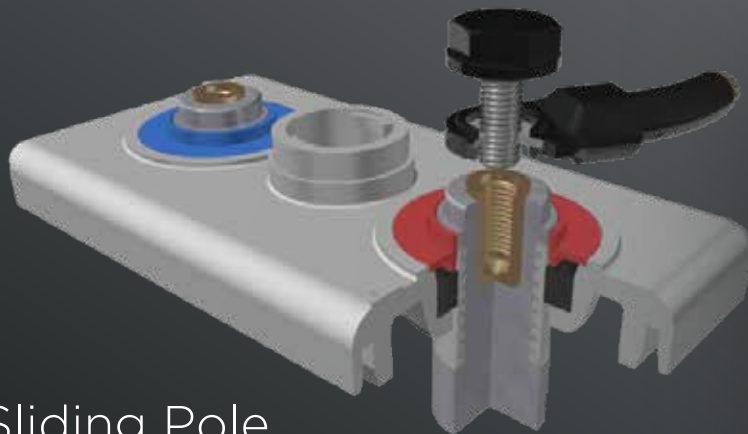
Product Code	Nom. Cap C/10	Nom. Cap C/100	Terminal [^]	Dimensions (mm)			Weight (Kg)	Stocked Item
				L	W	H		
2VO200	237	311	M10	103	206	354	18.3	–
2VO300	356	468	M10	145	206	354	26.4	–
2VO400	431	576	M10	124	206	471	30	–
2VO500	605	810	M10	166	206	471	40.8	✓
2VO700	739	1001	M10	191	208	658	52.5	–
2VO800	844	1165	M10	193	212	644	66.3	–
2VO1000	1085	1499	M10	233	210	674	81.7	✓
2VO1200	1356	1838	M10	275	210	645	90.8	–
2VO1500	1591	2085	M10	275	210	824	110	–
2VO2000	2168	2840	M10	399	214	799	156	–
2VO2500	2891	3785	M10	487	212	769	195.3	–
2VO3000	3474	4557	M10	576	212	771	231.4	–

Customised battery racking and cabinetry available on request (page 102).

For more details call the team today.

Sliding Pole Technology

- Premium sliding design with brush insert and rubber seal in the lid
- Hardness and acid resistance
- Effectively prevents top lid cracks and acid leakages
- Positive plate's expansion is safely absorbed
- Optimum current conductivity
- Perfect sealing
- Allow impedance measurements
- Safe and long operational life



[^] See page 110 for reference.

WeCo Lithium Batteries

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WeCo Lithium Energy Storage System

WeCo Dual Voltage 5K3

Valen is pleased to introduce our newest lithium battery energy storage system from WeCo – The WeCo Dual Voltage 5K3-XP.

Quality, adaptability and versatility abound with the WeCo modules. Designed and built in Italy from quality components, the WeCo Dual Voltage 5K3-XP modules can be installed either in series or parallel, in either high voltage or low voltage configurations.

These systems are suitable for a range of applications from residential to industrial, both on and off-grid applications.

The WeCo modules are compatible with a range of inverters and can be bundled with Valen range of quality products to create full plug-and-play systems. Reach out to the team today to discuss your energy storage requirements.

Applications include:



UPS



Diesel Genset



Comms



Solar



Mining



Telemetry



Data Centre



Rail



Features

Digital Smart BMS

WeCo has developed one of the most advanced BMS with active real time balancing with individual cell control.

Connected everywhere

Through the Mobile APP and Web monitoring, the system can be remotely monitored, controlled, debugged, firmware updated and historical information viewed. Along with this, the WeCo modules have RS485, CAN, 232 and WiFi connectivity.

Italian Quality & Design

First-class after-sales service worldwide from our skilled technicians.

10 Year Warranty

Giving installers and end users peace of mind.

Wall mountable

Units have green LED on front of units showing State of Charge (SOC).

Cycle Life

7000 Cycles – market-leading cycle life.

Easy to install and set up

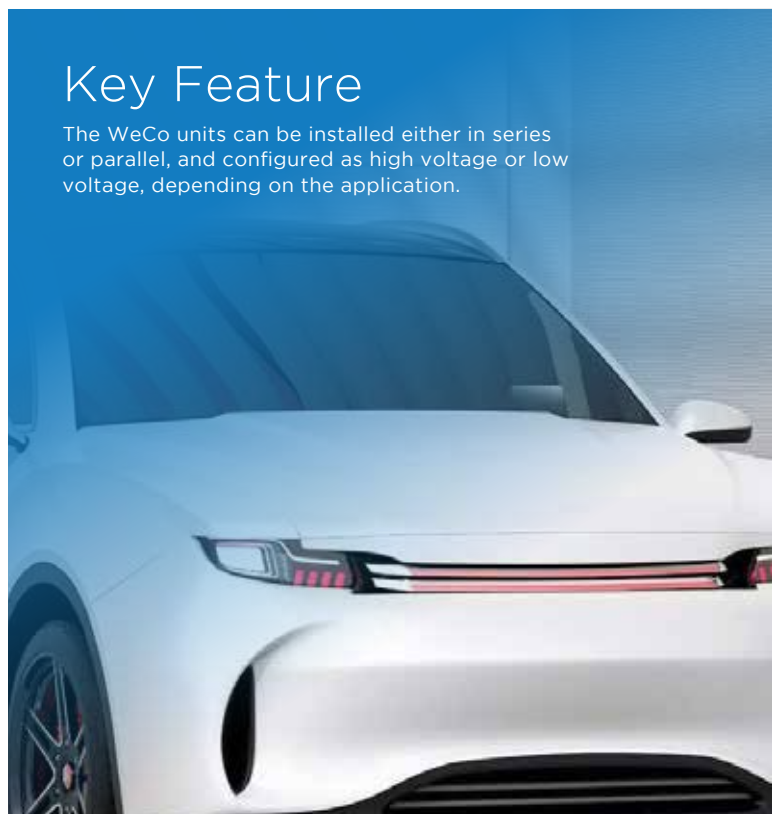
Great flexibility to work with existing hardware as it can be installed in open or closed-loop situations.

Simple 16 Pouch Cell construction

As opposed to 495 cylindrical cells in competitor units, drastically limiting the failure point in these WeCo units.

Key Feature

The WeCo units can be installed either in series or parallel, and configured as high voltage or low voltage, depending on the application.



16 Cell Module

This means the battery has a nominal voltage of 52V.

On or Off-grid

Available for both On or Off-grid applications.

Double Insulated

The modules are doubly insulated meaning they're floating and can be positive or negatively earthed to meet on site requirements.

VICTRON Compatible

WeCo units connect simply and easily with all Victron MPPT's, Charges, Inverter and Inverter Chargers. As one of the leading VICTRON dealers, VALEN can bundle all hardware, making it a one stop shop for your installation requirements.

WeCo Hub

For high voltage systems.

1C charge and discharge rates

Top Mounted Fuses

Fuses are mounted on top of the battery for easy access and can easily swap out if shorted.

Certification

Certified to IEC62619/UL1973 and CE/UN38.3

WeCo Lithium Energy Storage System



Specifications

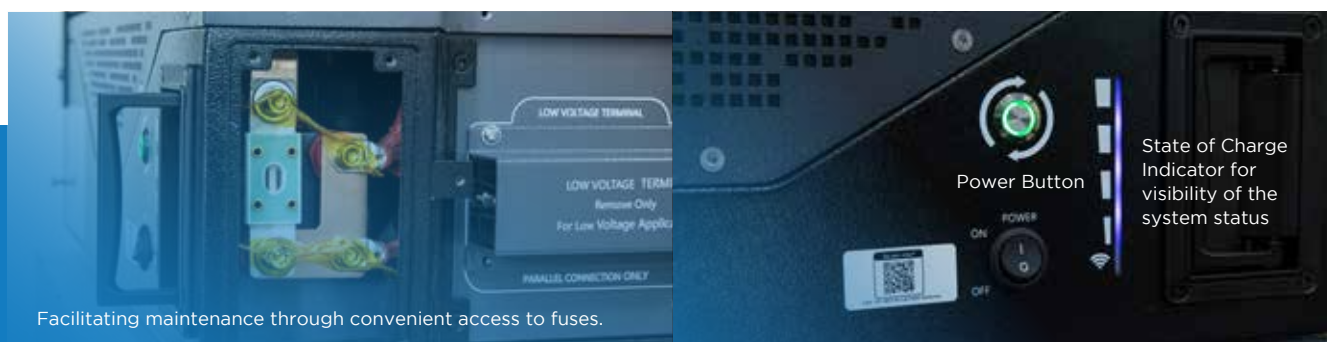
Parameters	5K3 LV/HV
Battery System Cap.	5.3 kWh
Single Module Nom. Voltage	52 Vdc
Application	Dual Voltage LV/HV
Modules Expandability	HV Mode: Max 16 Modules in Series with Single HV Box = One HV Cluster LV Mode: Max 8 Modules in Parallel without WeHub = One LV Cluster
Cluster Net Cap.	Max 144 Modules per HV System / Max 100 Modules per LV System
Voltage Range	48.5-100 Vdc
Net Capacity	105 Ah
Usable Capacity	100 Ah
Dimension	580 x 463 x 165 mm
Weight	57.3 Kg
Charge / Discharge Current	110 A
Step 01	160 (60 s)
Peak	200 (Peak 5 s)
Depth of Discharge	100%
Communication Port	RS485, CAN, 232, Wi-Fi
Single string qty	16 pcs
Discharge Temp.*	-20 - 55°C
Charge Temp. *	-10 - 55°C
Shelf Temp.	-10 - 50°C
Humidity	5% - 95%
Altitude	< 3000 m
Design life	15 Years (25°C)
Expected Life Cycles @ STC	>8000 (25°C)
Standards	IEC62619/UL1973 CE/UN38.3

WeCo Lithium Energy Storage System

Low Voltage Stackable



Battery Module	2	3	4	5	4+4
Battery System Capacity	10.4 kWh	15.6 kWh	20.8 kWh	26 kWh	41.6 kWh
Voltage Range	48.5 - 58.4 Vdc				
Dimensions (mm)	580x463x330	580x463x495	580x463x660	580x463x825	(2x) 580x463x660
Weight	114.6 kg	171.9 kg	229.2 kg	286.5 kg	2x 229.2 kg
Depth of Discharge	100%				
Charge/Discharge (Recommended)	160	240	320	400	640
Current (A) (Continuous)	210	300	390	480	780
(Peak 15s)	300	380	470	560	940
(Discharge Peak 5s)	400	600	800	1000	1600
Communication	RS485, CAN, 232, Wi-Fi				
Protection Class	IP23 / IP56				
Working Temperature	-20°C +60°C *				
Storage Temperature	-10°C +40°C				
Humidity	5% - 95%				
Altitude	< 3000 m				
Design life	15 Years (25°C)				
Expected Life Cycles @ STC	>7000 (25°C)				
Standards	IEC62619/UL1973 / CE / UN38.3				



Facilitating maintenance through convenient access to fuses.

Power Button

State of Charge Indicator for visibility of the system status

WeCo Lithium Energy Storage System

High Voltage Stackable



Battery Module	4	5	6	7	8
Battery System Capacity	20.8 kWh	26 kWh	31.2 kWh	36.4 kWh	41.6 kWh
Recommended Voltage	min 200V max 232V	min 250V max 290V	min 300V max 348V	min 350V max 406V	min 400V max 464V
Dimensions (mm)	580x463x660	580x463x825	580x463x990	580x463x1155	580x463x1320
Weight	229.2 kg	286.5 kg	343.8 kg	401.1 kg	458.4 kg
Depth of Discharge	100%				
Charge/Discharge	100A/100A				
Communication	RS485, CAN, 232, Wi-Fi				
Protection Class	IP23 / IP56				
Working Temperature	-20°C +60°C *				
Storage Temperature	-10°C +40°C				
Humidity	5% - 95%				
Altitude	< 3000 m				
Design life	15 Years (25°C)				
Expected Life Cycles @ STC	>7000 (25°C)				
Standards	IEC62619/UL1973 / CE / UN38.3				



WeCo Lithium Energy Storage System

WeCo Rack Mounted Low Voltage 5K3-XP

Valen is pleased to introduce our newest lithium battery energy storage system from WeCo – the WeCo Rack Mount Low Voltage 5K3-XP.

The WeCo Rack Mount Low Voltage 5K3-XP produces 5.3kWh of usable energy and is scalable up to 550 kWh. The rack-mount formation is the most compact low-voltage stackable storage and is suitable for a range of applications from residential to industrial, both on and off-grid applications.

WeCo modules are compatible with a range of inverters and can be bundled with Valen range of quality products to create full plug-and-play systems. Reach out to the team today to discuss your energy storage requirements.

Applications include:



UPS



Diesel Genset



Comms



Solar



Mining



Telemetry



Data Centre



Rail



Features

Digital Smart BMS

WeCo has developed one of the most advanced BMS with active real time balancing with individual cell control.

Connected everywhere -

Through the Mobile APP and Web monitoring, the system can be remotely monitored, controlled, debugged, firmware updated and historical information viewed. Along with this, the WeCo modules have RE485, CAN, 232 and WiFi connectivity.

Italian Quality & Design

First-class after-sales service worldwide from our skilled technicians.

Warranty, 10 Years

Giving installers and end users peace of mind.

Cycle Life

7000 Cycles – market-leading cycle life.

Easy to install and set up

Great flexibility to work with existing hardware as it can be installed in open or closed-loop situations.

Simple 16 Pouch Cell construction

As opposed to 495 cylindrical cells in competitor units, drastically limiting the failure point in these WeCo units.

16 Cell Module

This means the battery has a nominal voltage of 52V.

Key Feature

The modules are doubly insulated meaning they're floating and can be positive or negatively earthed to meet on site requirements.



On or Off-grid

Available for both On or Off-grid applications.

Double Insulated

The modules are doubly insulated meaning they're floating and can be positive or negatively earthed to meet on site requirements.

VICTRON Compatible

WeCo units connect simply and easily with all Victron MPPT's, Charges, Inverter and Inverter Chargers. As one of the leading VICTRON dealers, VALEN can bundle all hardware, making it a stop shop for your installation requirements.

WeCo Hub

Available for paralleling more than 15 modules.

1C charge and discharge rates

Certification

Certified to IEC62619 and CE/UN38.3



WeCo Lithium Energy Storage System



Specifications

Parameters	5K3 LV/HV
Module Capacity	5.3 kWh
Single Module Nominal Voltage	51.2 Vdc
Application	Low Voltage Application
Modules Expandibility	LV Mode: Max 15 Modules in Parallel = 1 LV Cluster Max 7 LV Clusters composed by maximum 15 modules in serial connection each + LV H U B
Voltage Range (Vdc)	47.5-58.4 Vdc BMS dynamically adjusts the operating values
Capacity (Ah)	105
Usable Capacity (Ah)	100
Dimension (mm)	550 x 430 x 155
Weight (kg)	57.3
Charge / Discharge Current (A)	100 (150 30sec)
Peak Discharge Current	200 Peak 5 s
Depth of Discharge	Up to 100%
Communication Port	RS485, CAN, 232, Wi-Fi
Modules in serial Connection	Up to 15 pcs in parallel
Discharge Temperature (°C)**	-20 ~ +60
Charge Temperature (°C)**	-10 ~ +55
Shelf Temperature (°C)**	-10 ~ +45
Humidity (%)	5 ~ 95
Altitude (m)	< 3000
Design life	10 Years (25°C)
Expected Life Cycles EOL 80%	> 7000 (25°C)
Standards IEC62619 UL1973 CE	IEC 61000 UN38.3
Features	Auto balancing BMS, 16 channels equalizer, Module local monitoring,
Protections	Fuse: 150A / 60Vdc Contactor 150A/60Vdc, Real-time balancing, Adaptive charge/discharge CAN logic, Three steps adaptive charging logic, 2xDI/DO programmable ports, Mobile APP for monitoring, control, debugging, firmware update, and historical information.

*- Module net usable energy is managed by the BMS control logic to 100Ah.

**See Warranty Terms and the Standard Test Conditions "STC" and the operative temperature.

All data subject to the change without prior notice, no part of this document can be copied or reproduced without the written permission of WeCo.

5K3 -XP Is designed to operate with rack support and indoor or in IP56 Cabinets.

WeCo Lithium Energy Storage System

Rack Mounted 5K3-XP



Battery Module	4	5	6	7	8	8+7
Battery System Capacity (kWh)	20.8	26	31.2	36.4	41.6	78.0
Voltage (Min/Max)	47.5 / 58.4					
Cabinet Type B (Outdoor+Cooling)	9 RACK			18 RACK		
Cabinet Weight Type B (Empty)	210kg			290kg		
Modules Weight (Kg)	229.2 *	286.5	343.8	401.1	458.4	2x458.4



WeCo Lithium Energy Storage System

A/C Cooled Stand Alone Cabinet IP 56/4U Slots



Voltage Range 47.5-58.4	Tower HV Modules	Max Current	Capacity
	4	400	20.8
	5	500	26
	6	600	31.2
	7	700	36.4
	8	800	41.6
	9	800	46.8
	10	900	52
	11	950	57.2
	12	950	62.4
	13	950	67.6
	14	1000	72.8
	15	1050	78

BATTERY ACCESSORIES

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Battery Equalisers

Temperature, battery cell chemical composition, and individual battery self-discharge rates can cause battery systems in series to become unbalanced. This imbalance will result in the batteries incorrect charging (under or overcharging) ultimately causing sulphation and premature plate corrosion. As the battery system ages, this voltage discrepancy will increase, resulting in early battery system failure.

Enter the Valen Battery Equaliser range:

The Valen battery equaliser, equalises or balances out these voltage discrepancies as soon as a 2mV battery voltage difference has been detected. By adding a Valen Battery Equaliser to the battery system, the performance will be enhanced, and the battery life will be drastically improved. Valen Equalisers come in a variety of sizes, allowing them to be retrofitted into a variety of applications. Multiple Valen Battery Equalisers may be used on one system for the complete system to be covered.



Product Code	Equaliser Size	Battery Nominal Voltage	Optimising Current	Quiescent Current	Dimensions	Low Voltage Disconnect
BA20003	2 Way	12V	0-5A	<3mA	70 x 70 x 27	1.0V
BA20004	4 Way	2V/6V/12V	0-10A	5mA (12V) 1.2mA (24V)	62 x 124 x 27	1.8V
BA20005	5 Way	2.4V/3.6V/6V/9V/12V	0-10A	5mA (12V) 1.2mA (24V)	160 x 60 x 35	1.8V
BA20006	8 Way	2.4V/3.6V/6V/9V/12V	0-10A	5mA (12V) 1.2mA (24V)	140 x 110 x 60	1.8V
BA20002	16 Way	2.4V/3.6V/6V/9V/12V	0-10A	5mA (12V) 1.2mA (24V)	265 x 140 x 60	1.8V

Battery Boxes



Valen Battery Boxes protect your batteries from exposure to harsh weather conditions while holding them securely in place. Constructed of tough, high-quality polypropylene for protection, the Valen Battery Boxes are impervious to battery acid.

Product Code	Description	Internal Dimensions
BA22003	Battery Box - Small	270 x 180 x 195mm
BA22002	Battery Box - Medium	320 x 180 x 195mm
BA22001	Battery Box - Large	390 x 180 x 195mm
BA22004	Battery Box - Extra Large	612 x 320 x 356mm

Torque Wrench



The Valen Torque Wrench is easy to set; a transparent insulated scale range eliminates torque setting errors. When the setting has been achieved, it is locked in place, so accidental changes to the setting are impossible. A mechanically locked retaining system ensures very reliable retention of the actuating tools. Once the desired torque has been reached, the Valen Torque Wrench will automatically reset itself, ready for further use. The Torque Wrench is also reversible for tightening left-handed threads

Product Code	Length	Square Drive	Range	Weight
BA21020	290mm	3/8 Inch	5-25Nm	1.23kg

Terminal Covers



Valen Terminal Covers are designed to be used for the protection of the battery terminals after installation. Made from robust, thick and durable rubber, the Valen Terminal Covers are colour-coded for easy identification and designed for years of hard work.

Available in extra small, small and large sizes.

Product Code	Description	To Suit
BA26002 BA26001 BA26003	Terminal Insulator Extra Small - Pair or Black or Red	32(L) x 10(cable hole) x 22(internal)
BA26007 BA26008	Terminal Insulator Small - Black or Red	80(L) x 14(cable hole) x 22(internal)
BA26005 BA26006	Terminal Insulator Large - Black or Red	99(L) x 18(cable hole) x 30(internal)

Automotive Posts

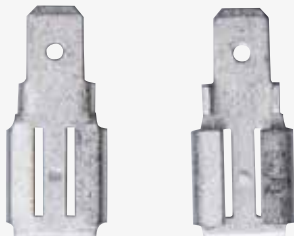
Valen Automotive Posts convert the standard insert terminal of the battery to an automotive post terminal typically used in starter applications. Supplied in pairs, the Valen Automotive Posts are available in M6 and M8 configurations.



Product Code	Description	To Suit
BA24039	6mm Terminal Adaptor Posts	Batteries with M6 terminals
BA24041	8mm Terminal Adaptor Posts	Batteries with M8 terminals

Terminal Conversion Adaptors - Spade

Valen Spade Terminal Conversion Adaptors are available in F1 to F2 and F2 to F1. These adaptors provide an easy and simple solution to customise batteries to retrofit to every application either speeding up or slowing down the current flow.



Product Code	Description	To Suit
BA24044	F1 - F2 Terminal Converters	F1 Spade Terminal
BA24045	F2-F1 Terminal Converters	F2 Spade Terminal

Battery Warning Stickers

Battery Warning Stickers provide an effective, on-the-spot reminder to help keep technicians safe on site. Valen has designed Battery Warning Stickers for battery sizes 12V9Ah right through to 200Ah.

Customised battery size stickers are available on request.
Size: 90 x 55mm



Product Code	To Suit Battery	Product Code	To Suit Battery
BA25013	12V9Ah	BA25011	12V65Ah
BA25003	12V12Ah	BA25012	12V70Ah
BA25007	12V26Ah	BA25014	12V90Ah
BA25008	12V33Ah	BA25002	12V100Ah
BA25009	12V40Ah	BA25004	12V120Ah
BA25010	12V55Ah	BA25005	12V150Ah
		BA25006	12V200Ah

Flexible Battery Cables



Valen Flexible Battery Cables are designed to work in a variety of different systems thanks to their adaptability. Durable and strong insulation eliminates the risk of short-circuiting. Both 190A and 350A current rated cables are available.

Customised Battery Cables are available on request.

Product Code	To Suit	Length
BA24018	Smaller battery systems up to 190A	160mm
BA24019	Smaller battery systems up to 190A	230mm
BA24021	Smaller battery systems up to 190A	5000mm
BA24022	Smaller battery systems up to 190A	700mm
BA24023	Smaller battery systems up to 190A	800mm
BA24024	Smaller battery systems up to 190A	900mm
BA24025	Larger battery systems up to 350A	1500mm
BA24026	Larger battery systems up to 350A	230mm

Front Terminal Battery Link



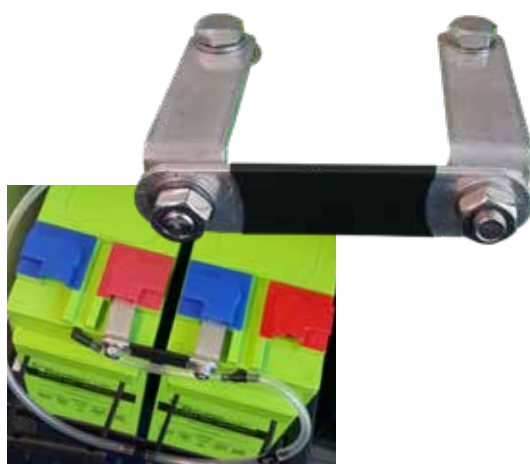
Valen Front Terminal battery links are designed to work on the complete range of Valen Front Terminal batteries. Slotted terminal holes allow for terminal movement preventing battery post damage.

Valen Front Terminal battery links are insulated for short circuit protection, making them the safest regular Front Terminal battery link.

Front Terminal Flat Battery Link - M6/8

Product Code	Hole-to-Hole Length	Total Length
BA24032	65mm	95mm

Front-Facing Front Terminal Links



Valen Forward Facing Front Terminal links are designed to work on the complete range of Valen Front Terminal batteries. These links allow for easy and safe access for technicians where the batteries are installed in multi-layer racking.

Front Facing links will fit neatly under the Valen Front Terminal battery protection cover, ensuring they are always covered to minimise the risk of short-circuiting. In stock and ready to go, the Valen Front terminal links are an accessory worth installing in larger projects.

Product Code	Description
BA24030	Front Facing Battery Link Adaptor, M6 suits Front Terminal Batteries
BA24031	Front Facing Battery Link Adaptor, M8 suits Front Terminal Batteries

Valen Custom Battery Cables

Getting easy access to the correct connector cable for your project can be tedious. The Team at Valen understand that so have put together a comprehensive range of Cables, Solar Cables, and Connectors to make your job easier. These can be purchased as individual items or reach out to us for a price on a customised connector cable solution.



Flexible Connector Cable

Valens Flexible Cable is Double Insulated for additional protection and is available in a range of different sizes;

6mm, 10mm, 16mm, 25mm, 35mm, 50mm, 70mm, 95mm, 120mm



Solar Cable

Valens Solar Cable Figure 8 PV1-F Thin Sheath is available in both 4mm and 6mm diameters. Highly flexible, it is easy adaptable to suit a range of solar cabling projects. Valens Solar Cable comes standard in 100m or 500m Drum size. Please inquire for custom meterage.



Connectors and Lugs

Locking cable couplers for 2.5 & 4.0mm solar cable, easy to assemble with minimal tooling. These IP67-rated connectors are designed to meet the stringent requirements of photovoltaic installations and the plugs are equipped with 'MC-Multilam' technology for very low contact resistance

Valen Aluminium Terminal lugs are ideal for crimping to XLPE Conductor cables. Manufactured from ETP-Copper, these lugs are then Tin Plated for protection against oxidation, and durability. Valen MC4 Connectors are genuine parts and designed for a lifetime in solar applications.

CTA device: The Valen team are available to help you design and supply custom cabling and lug options for your next project. Contact the team today to discuss your project requirements.

Valen Cable and Connections

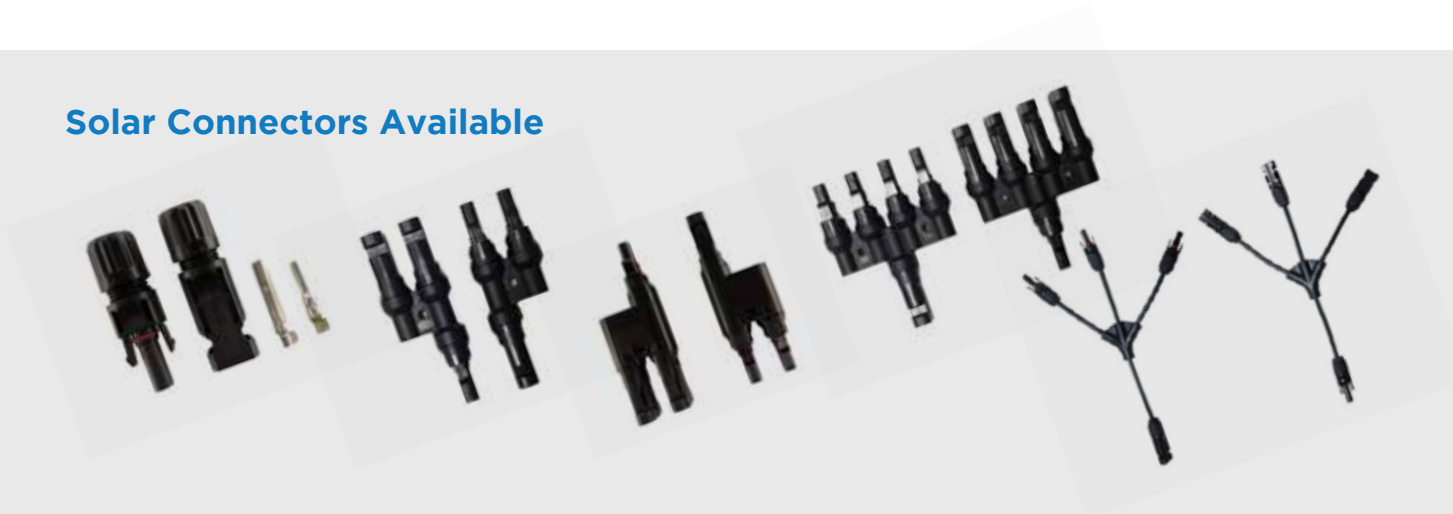
The small and invaluable, the missing link to your solar system.

With Valen's range of cable and connections, there is always a solution to ensuring your solar system is well connected and running efficiently. Customised cables and further accessories are available on request.



Product Code	Description	Quantity
SA53069	Male/Female MC4 Connectors	Pair
SA53052	Figure8 DC Solar Cable - 2x 4mm	100m
SA53047	Figure8 DC Solar Cable - 2x 6mm	100m

Solar Connectors Available



Other Cables and Connections Available

Make sure your system has the exact cables and connections you require. Valen can source customised cables and connections for your system requirements.

Contact us on the below details with your system requirements and we'll ensure you have all the components to make your next installation a success.

BATTERY CHARGERS

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Valen 12V4A



The Valen multi-stage battery charger is designed for small battery systems in commercial and workshop applications. Its compact design and economical price make it a good quality, all-round 12V battery charger. With an LED display that glows red when in boost charge and will glow green when in float charge, you will know when your battery is charged and ready to go.

Product Code	BC30001	Dimensions	58x115x35
Output Voltage	12V	Weight	0.305kg
Output Current	4A	Input Voltage	240VAC
Output Connection	Alligator Clips		

Valen 24V1A



The Valen multi-stage battery charger is designed for small battery systems in commercial and workshop applications. This charger is suitable for use with mobility scooters and powered wheelchairs. With an LED display that glows red when in boost charge and will glow green when in float charge, you will know when your battery is charged and ready to go.

Product Code	BC30002	Dimensions	96x43.5x28
Output Voltage	24V	Weight	0.220kg
Output Current	1A	Input Voltage	240VAC
Output Connection	Alligator Clips		

Advanced LED Indication

Valen Convection Cooled Battery Chargers come with advanced LED indication. Not only will you be able to see when your batteries are being charged, you'll also be able to view the current charging capacity of the battery.

Contact us now on the below details to supply your clients with the better battery charger.

Valen Convection
Cooled 24V4A



The Valen 24V4A Convection Cooled Battery Charger boasts superior quality and reliability with the ability to correctly charge and maintain batteries ensuring longevity. This has an input voltage of 110V to 240V allowing it to operate universally. Thermal protection against overheating is also built-in as well as reverse polarity, output shorting and spark protection.

Product Code	BC30003	Dimensions	190x145x70
Output Voltage	24V	Weight	0.406kg
Output Current	4A	Input Voltage	110-240VAC
Output Connection	Cannon/XLR Connector		

Valen Convection
Cooled 24V6A



The Valen 24V6A Convection Cooled Battery Charger boasts superior quality and reliability with the ability to correctly charge and maintain batteries ensuring longevity. This has an input voltage of 110V to 240V allowing it to operate universally. Thermal protection against overheating is also built-in as well as reverse polarity, output shorting and spark protection.

Product Code	BC30004	Dimensions	190x145x70
Output Voltage	24V	Weight	0.406kg
Output Current	6A	Input Voltage	110-240VAC
Output Connection	Cannon/XLR Connector		

Valen Convection
Cooled 24V8A



The Valen 24V8A Convection Cooled Battery Charger boasts superior quality and reliability with the ability to correctly charge and maintain batteries ensuring longevity. This has an input voltage of 110V to 240V allowing it to operate universally. Thermal protection against overheating is also built-in as well as reverse polarity, output shorting and spark protection.

Product Code	BC30006	Dimensions	190x145x70
Output Voltage	24V	Weight	0.406kg
Output Current	8A	Input Voltage	110-240VAC
Output Connection	Cannon/XLR Connector		

12V EPS Battery Chargers

The EPS Battery Charger is compact in size and lightweight. It has a short circuit and reverse polarity protection and is suitable for any lead-acid battery. You can switch to the mute function, and a switch field for the selection of the charging voltage and timer function is also available. The EPS Battery Charger is ideal for use in automotive, caravans and marine equipment. Optional accessories include remote control and temperature sensor.



Product Code	Output Voltage	Output Current	Output Connection	Input Voltage	Dimensions	Weight
BC31002	12V	4A	Alligator Clips	260VAC	150x110x40	0.7kg
BC31003	12V	8A		260VAC	150x207x60	1.0kg
BC31004	12V	10A		240VAC	155x153x59	1.0kg
BC31005	12V	14A		260VAC	170x207x60	1.5kg
BC31006	12V	20A	Alligator Clips	240VAC	155x153x59	1.0kg
BC31007	12V	25A	Two	260VAC	310x240x77	3.5kg
BC31008	12V	45A	Two	260VAC	325x230x102	5.0kg

24V EPS Battery Chargers

EPS 24V4A Battery Charger has been designed and manufactured to suit the needs of the mobility scooter user. The multi-stage charger will first lightly charge the batteries, then boost charge the batteries to reduce the time required to charge the batteries. When the batteries are fully charged, the charger reduces the voltage and consequently the current, then maintains the batteries by applying small pulses to ensure that the batteries are at their peak state of charge when required.



Product Code	Output Voltage	Output Current	Output Connection	Input Voltage	Dimensions	Weight
BC31010	24V	4A	Cannon/XLR Connector	260VAC	105x207x60	1.0kg
BC31012	24V	7A	Cannon/XLR Connector	260VAC	170x207x60	1.5kg
BC31015	24V	15A	Two	260VAC	310x240x77	3.5kg
BC31016	24V	25A	Two	260VAC	325x234x102	15.5kg

12V Victron Battery Chargers

Call the team today to discuss the full Victron range of Battery Chargers



Product Code	Model	Output Voltage	Output Current	Output Connection	Input Voltage	Dimensions	Weight
BC32001	BlueSmart IP65	12V	4A	Clamps/M8 Eyelets	230VAC	182x81x45	0.9kg
BC32002	BlueSmart IP65	12V	10A	Clamps/M8 Eyelets	230VAC	190x105x60	0.9kg
BC32003	BlueSmart IP22	12V	12A	Clamps/M8 Eyelets	230VAC	190x105x60	0.9kg
BC32006	Centaur	12V	100A	M8 Studs	90-265VAC	505x255x130	12kg
BC32016	BlueSmart IP67	12V	25A	7/7 Plug	180-265VAC	99x219x65	2.4kg

24V Victron Battery Chargers

Valen stocks a wide range of Victron Battery Chargers to suit your next project.



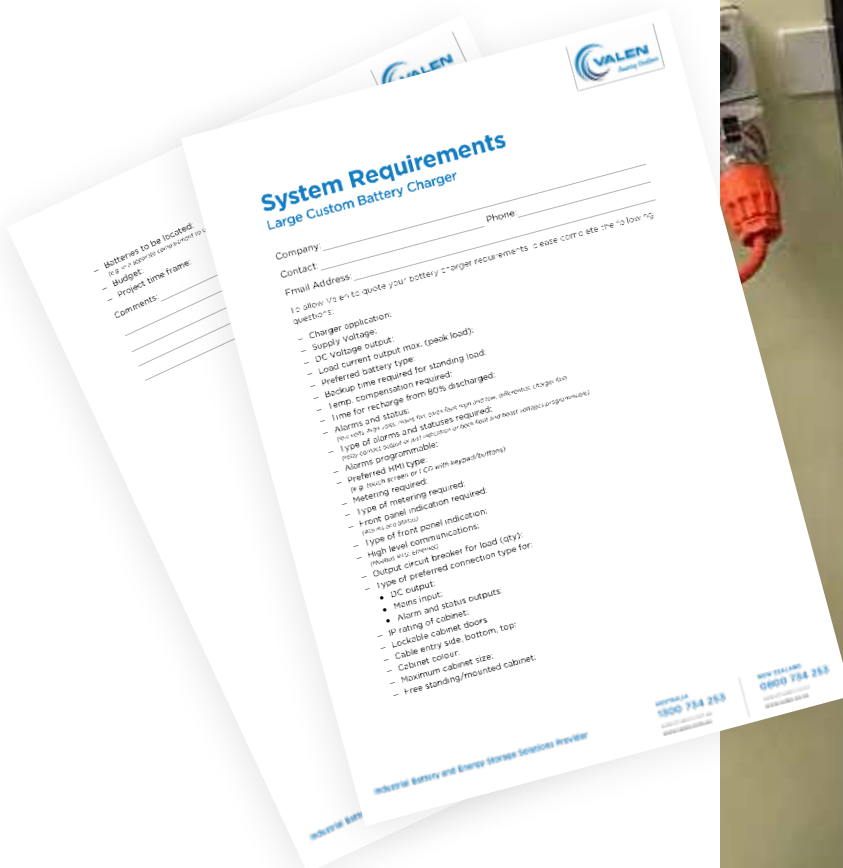
Product Code	Model	Output Voltage	Output Current	Output Connection	Input Voltage	Dimensions	Weight
BC32017	BlueSmart IP65	24V	5A	Clamps/M8 Eyelets	230VAC	182x81x45	0.9kg
BC32002	Skylla IP65	24V	35A	M6 Bolts	120/230VAC	401x265x151	6kg
BC32014	Skylla TG	24V	100A	M8 Studs	230VAC	365x250x257	10kg
BC32018	Skylla TG	24V	50A	M8 Studs	230VAC	365x250x147	5.5kg
BC32009	Skylla TG	24V	25A	M8 Studs	230VAC	365x250x257	10kg

Customised Battery Chargers

In keeping with our specialist energy storage solutions, Valen welcomes enquiries for customised battery chargers and DC power supplies. Our team will assess and recommend a charger solution, bearing in mind your full project scope, ensuring that your system operates at maximum efficiency.

Customised Lithium Battery Charger systems designed to work in with existing BMS parameters of your battery are available on request as well.

Contact Valen now for the Battery Charger checklist!

System Requirements
Large Custom Battery Charger

Company: _____ Phone: _____
Contact: _____
Email Address: _____

To allow Valen to quote your battery charger requirements, please complete the following questions:

- Charger application:
 - Supply voltage:
 - DC Voltage output max. (peak load):
 - Load current output max. (peak load):
 - Preferred battery type:
 - Backup time required for standing load:
 - Time to recharge from 80% discharged:
 - Time for recharge from 100% discharged:
 - Alarms and status:
 - (If remote, please specify: remote for status, local for alarm, and low efficiency: charge full)
 - Type of alarm and status required:
 - Alarms programmable:
 - Alarm type:
 - (If a touch screen or LCD with keypad/buttons)
 - Metering required:
 - Type of metering required:
 - Front panel indication required:
 - Type of front panel indication:
 - High level communications:
 - Output circuit breaker for load (ohy):
 - Type of preferred connection type for:
 - DC output:
 - Mains input:
 - Alarm and status outputs:
 - IP rating of cabinet:
 - Lockable cabinet doors:
 - Cable entry side, bottom, top:
 - Cabinet colour:
 - Maximum cabinet size:
 - Free standing/mounted cabinet:

Valen Australia 1800 784 253
Valen New Zealand 0800 784 253



Battery Charger Accessories

In keeping with Valen's mission to be the End-to-End Solution provider of Industrial Batteries and Energy Storage, Valen realises the need to have a range of battery charger accessories ready and available for the project at hand.

These battery charger accessories may be a Cannon plug to Alligator Clip Adaptor that lets you continue to use the same battery charger for different connection types!

The Valen team look forward to being the End-to-End Solution Provider for your next project so don't forget to ask us to include accessories when speaking with your Business Development Manager on the next project.

ENETEK

FOR QUALIFIED PERSONNEL ONLY

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MODUFLEX+ Hybrid Power Solution



The Moduflex+ hybrid series is designed using Enetek's state of art high efficiency switch mode rectifier modules, solar converter modules as well as DC/DC converter modules. Coupled with the intelligent controller, the solution comes complete with the respective load and battery distribution, AC incoming as well as surge protection. The solution can be customized accordingly to specific requirements.

The user friendly SMU01 controller, coupled with its compact size and simple-to-operate interface, is highly adaptable and provides the monitoring and management of the system solution.

Features:

- MPPT - Maximum Power point Tracking
- Highly Efficient @ >97% - Reduces losses and lowers operating costs
- Input Ground Fault Detection - PV input Continuous Ground fault detection
- Excellent EMC Performance - Lower interference and excellent susceptibility
- Wide Input Voltage Range - Support High String Voltage up to 430Vdc
- Wide Temperature Range - Applications in harsh climatic conditions
- Compliant with Global Standards - Delivers quality, performance and reliability in power solutions

SMU01 Smart Monitoring Unit



SMU01 is an intelligent controller suitable for use with Enetek's range of telecom rectifiers. The simple and effective controller unit offers a complete power system management function including data acquisition and processing, battery management as well as monitoring and control of the system solution.

The user-friendly SMU01 controller, coupled with its compact size and easy-to-use interface, is highly adaptable and can be incorporated into small design spaces.

Product Code

PS84006

ETR + 2048 Rectifier Module



Control & Monitoring

High & low mains shutdown, high temperature shutdown, rectifier failure, overvoltage shutdown, fan failure, communication failure

The fully Digital Controlled ETR 2048 rectifier module is designed and optimized for demanding power needs across different applications and industries.

The modularity design, coupled with its cost-effectiveness package, power density and reliability, ensures the overall availability of the system solution.

Product Code	PS84022
Nominal Voltage	48VDC
AC Input Range	85VAC to 305VAC
DC Output Range	43VDC to 58VDC
Output Power	2000W
Output Current	41.7A @ 48VDC
Temperature Range	-40°C to +75°C (de-rates above 55°C)

ETR + 3048 Rectifier Module



Control & Monitoring

High & low mains shutdown, high temperature shutdown, rectifier failure, overvoltage shutdown, fan failure, communication failure

The fully Digital Controlled ETR 3048 rectifier module is designed and optimized for demanding power needs across different applications and industries.

The modularity design, coupled with its cost-effectiveness package, power density and reliability, ensures the overall availability of the system solution.

Product Code	PS84020
Nominal Voltage	48VDC
AC Input Range	85VAC to 305VAC
DC Output Range	43VDC to 58VDC
Output Power	2000W
Output Current	62.5A @ 48VDC
Temperature Range	-40°C to +75°C (de-rates above 55°C)

ETS + 3248 Solar Converter Module



Control & Monitoring

High & low mains shutdown, high temperature shutdown, rectifier failure, overvoltage shutdown, fan failure, communication failure

The fully Digital Controlled ETS 3248 Solar Converter module is designed with MPPT algorithm, provides real time power tracking and efficiency above 97% for renewable Power in telecom and the other industries.

The modularity design, coupled with its cost effectiveness package, power density and reliability, ensures the overall availability of the system solution.

Product Code	PS84021
Nominal Voltage	48VDC
AC Input Range	100VDC to 380VDC
DC Output Range	53.5VDC (adjustable 43VDC to 58VDC)
Output Power	3200W
Output Current	62.5A @ 51.2V
Temperature Range	-40°C to +75°C (de-rates above 55°C)

BATTERY TESTERS

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3 Ways to Test Batteries

Pulse Load Testing

For a quick indication of a small-medium battery capacity, a pulse load test is applied allowing for easy instantaneous results.

Load

Is conducted by means of a full discharge to the battery, ensuring peace of mind that the battery will hold up in its required application.

Impedance

Measuring the impedance of a battery is a reliable indicator of the health of a battery and is taken as a comparative reading.



Pulse Load Testing

What is pulse load testing?

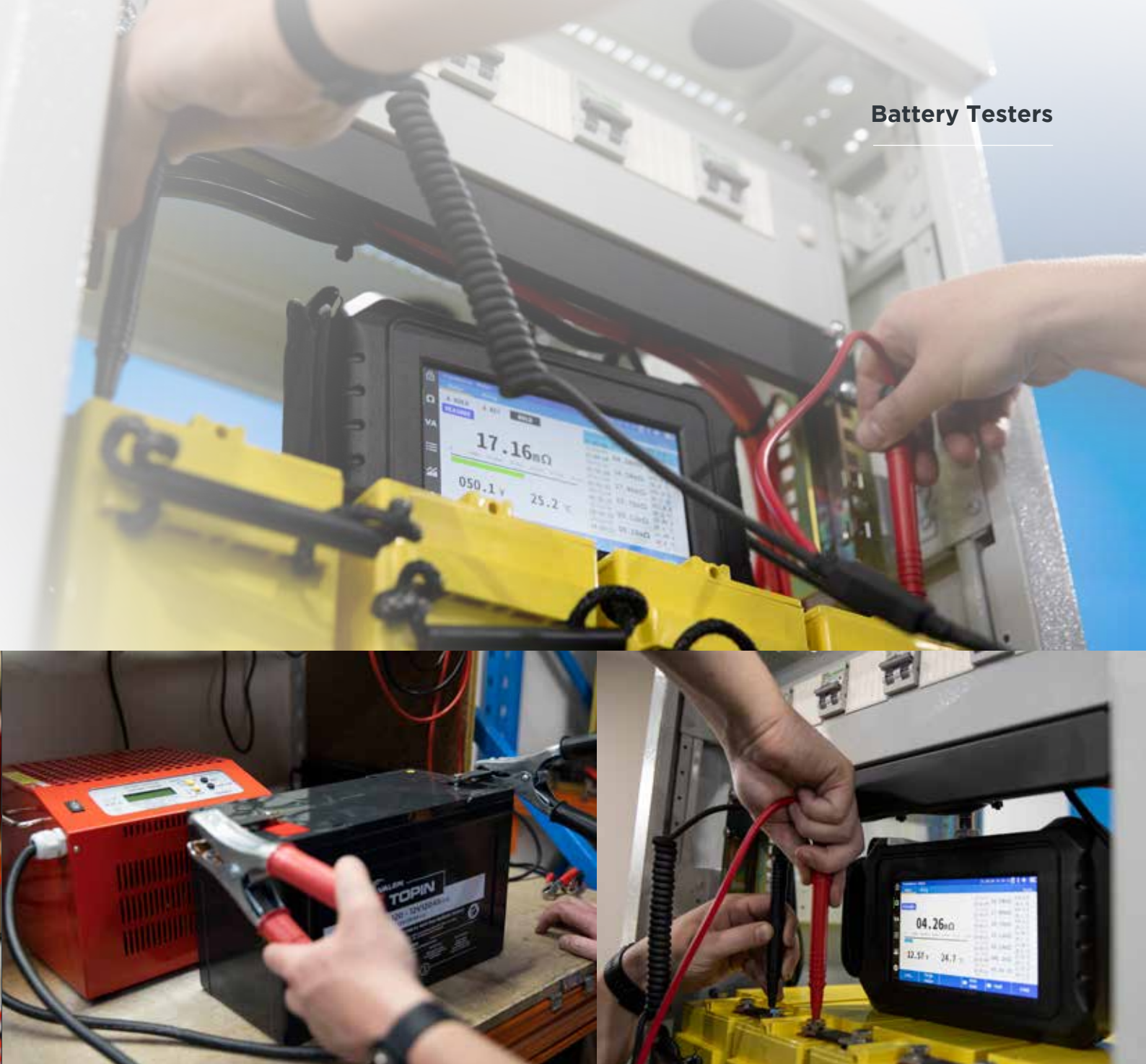
Pulse load testing is a form of battery testing where the tester does short bursts of current, drawing from the battery and then uses an internal algorithm to determine the capacity of the battery.

Why would you use pulse load testing?

Pulse load testing is predominately used in applications where the technician does not have the time to conduct the full load test or where it would not be efficient or cost-effective to do so.

Who would use pulse load testing?

Valen would mainly recommend Pulse Load Testing for fire and security, door automation or small UPS applications. These are all applications where the battery is on a constant charge and where smaller batteries with the tab (spade) terminals are utilised, normally up to a 12V21Ah



Constant Load Testing

Constant current load testing is when a current can be set on a battery tester and no matter what the voltage does, the current will stay the same, over against a carbon pile tester which drops the voltage as the current drops. Constant Current Load Testing produces an absolute result, therefore is often used by manufacturers to specify the exact Battery Capacity, and Quality Assurance Teams to ensure that their product supply is up to standard.

Why would you use a Constant Current Load Tester?

To test the true capacity of a battery. It can be used in Quality Assurance to confirm the battery's true capacity over against the battery manufacturers specification sheet, as well as in maintenance applications to ascertain the battery's infield performance

Who would use Constant Current Load Tester?

Valen recommends the CCOLT Battery Load Testers are utilised in markets such as Mobility, Cleaning & Fire. These Industries regularly supply and service the same equipment. therefore it is beneficial to be able to conduct a full discharge test to simulate the real-life field test scenario, allowing the technician to problem solve the issue. For example a load of 5A over 10hours, you could simulate on the tester

Impedance Testing

What is Impedance testing?

Impedance testing is where an AC signal is injected into a DC battery to check the internal resistance of a battery. The most important thing to note is that it is an AC signal, not a DC signal, which is resistance testing.

Why would you use impedance testing?

Impedance Testing is utilised in applications where the batteries cannot be removed or disconnected from their installation for testing.

This could be in a UPS or communication site holding up critical infrastructure.

Who would use impedance testing?

Utility companies, telecommunication, UPS technicians to name a few. Impedance testing is suitable for anyone that's testing larger batteries and systems on a regular service schedule.

Indicative Tester

Chrome IBT

Small, quick and intuitive

The Chrome Intelligent Battery Tester (IBT) provides DC Voltage and available Ampere Hour (Ah) capacity of a battery within seconds. Easily portable and powered by the battery under test, the Chrome IBT provides instant results which require no user interpretation. A low and high voltage warning is also displayed to assist the technician with analysing the batteries current state.

Chrome Intelligent Battery Tester is designed for use on small AGM batteries.



Features

Pocket-Sized

Chrome IBT units are pocket-sized for easy transportation and adding to technicians toolkit.

Fast Return

Delivering fast results, the Chrome IBT enables technicians to save time on site.

Simple and Quick to Use

Easily attach the Chrome IBT to the battery by sliding on the terminal clamps for an instant reading.

Minimise Replacement

Chrome IBT minimises the number of battery replacements saving costs and the environment.

Instantaneous Results

Instantaneous results allow technicians equipped with the Chrome IBT to increase battery sales as clients can see their current battery state.

Calibration Kits

Chrome IBT calibration kits are available; recalibration recommended annually.



Specifications

Product Code	BT12014
Operating Voltage	12VDC
Battery Types	Valve Regulated Lead Acid (VRLA)
Battery Sizes	1.2Ah to 200Ah*
Display	Backlit LCD
Dimensions	100x55x35
Weight	0.6kg

*However Valen recommends the Chrome IBT to test batteries up to 21Ah.

Indicative Tester

612 IBT

Small, quick and intuitive

The 612 Intelligent Battery Tester advances the Chrome IBT with its durable high impact ABS case protected by a rubber holster ideal for harsh working conditions. By giving a clear and accurate indication of a battery's Ah capacity available, the 612 IBT makes it easy to identify replacements quickly. An identification table printed on the tester shows standard battery sizes and what Ah capacity rate they should be recharged or replaced. The 612 IBT is designed to indicate the capacity of a range of VRLA AGM and Gel batteries.



Features

Pocket-Sized

612 IBT units are pocket-sized for easy transportation and adding to technicians toolkit

Fast Return

Delivering fast results, the 612 IBT enables technicians to save time on site

Simple and Quick to Use

Easily attach the 612 IBT to the battery by sliding on the terminal clamps for an instant reading

Flexibility

The flexibility of the 612 IBT allow users to test a broader range of 6V and 12V batteries

Minimise Replacement

612 IBT minimises the number of battery replacements saving costs and the environment

Instantaneous Results

Instantaneous results allow technicians equipped with the 612 IBT to increase battery sales as clients can see their current battery state

Calibration Kits

612 IBT calibration kits are available; recalibration recommended annually



Specifications

Product Code	BT12012
Operating Voltage	6 & 12VDC
Battery Types	Valve Regulated Lead Acid (VRLA)
Battery Sizes	6V: 1.2Ah to 10Ah 12V: 1.2Ah to 100Ah
Display	Backlit LCD
Dimensions	84x170x41
Weight	0.8kg

*However Valen recommends the 612 IBT only tests up to 21Ah batteries

Load Tester

BACA 12V & 24V

Designed to test batteries and their battery chargers, the Valen Battery and Charger Analyser (BACA) is an invaluable instrument for technicians. The 12V and 24V BACA Testers simulate a full cyclic discharge test and automatically perform multiple cycles if connected to a compliant charger.

Demonstrating that a battery has the capacity required for its intended application as well as deciphering the performance of a battery charger can be a time-consuming and tedious process. The guesswork is taken away with these programmable Valen battery testers that can display results on an LCD screen or download graphic results for analysis. A printable report can be formatted with a customisable comments area and given to the end-user.



Features

Accurate

Valen 12V & 24V Battery and Charger Analyser (BACA), perform a full battery discharge test producing an accurate and absolute report on the battery performance and/or charger being tested.

Software

Easy to use software enables test results to be stored, exported to a PDF or printed. Reports can be customised with your company logo, testing details and comments so make ideal reports to be given to the end-user if required.

Ability to Cycle Unassisted

Valen BACA 12V and 24V units can complete up to 200 cycles unassisted and record the battery and/or charger performance data, enabling the user to set up the system and leave it to run tests, ultimately saving time on battery testing.

Flexible Range

The Valen BACA units are flexible and allow for testing of an extensive range of battery capacities from 0.8Ah to 200Ah.



Specifications

Operating Voltage	12 & 24VDC	YBT10001
Battery Types	The BACA tester can test any 12V or 24V battery technology including VRLA, LiFe PO4 and others	
Discharge Current	1-25A	
Display	LCD Screen	
Dimensions	200x140x190	
Weight	1.5kg	

Product Code	Charging Time	Max. no. of Cycles
BT10001	1h to 99h	200
BT10002	1h to 99h	200
BT10009	1h to 99h	200

Load Tester

Captester

Valen Captester conducts a full cyclic discharge battery test giving the battery user accurate knowledge of their exact battery capacity.

Designed with the Mobility Market in mind, The Captester can test individual 12V batteries and 24V Battery Chargers. This will enable Mobility Scooter and Electric Wheelchair Repairers to ascertain and analyse which battery or charger is the cause of the problem. Test results are then able to be viewed on the Captester LCD screen or downloaded then stored on your PC. A printed copy with a customisable comments area may be given to the end-user allowing them to see a clear picture of their system performance.

A truly reliable battery and charger test, the Captester takes away the guesswork and has become the number one handy battery tool for Mobility Repair agencies.



Features

Accurate

Valen Battery and Charger Analyser (BACA) and Captesters, all perform a full battery discharge test producing an accurate and absolute report on the performance of the battery and/or charger under test

Software

Easy to use software allows for data and tests results to be stored, exported to PDF or printed for the analysis of batteries

Mobility in Mind

Valen Captester is designed specifically with the mobility market in mind allowing the user to test individual 12V batteries as well as their 24V charger

Flexible Range

The Valen BACA and Captester units are flexible and allow for testing of an extensive range of battery capacities from 0.8Ah to 200Ah

Percentage Results

Unlike the BACA Battery tester, the Captester allows the user to view the results as a percentage of the full capacity. No table is needed to ascertain the C1 capacity of the battery, instead the capacity as stated on the battery is entered into the tester, and the final result is displayed as a percentage of original capacity making it user friendly especially in applications such as mobility where the original battery capacity can vary between manufacturers.



Specifications

Operating Voltage	12 & 24VDC
Display	LCD Display
Dimensions	200x140x190mm
Weight	2kg

Product Code	Charging Time	Max. no. of Cycles
BT10003	1h to 99h	1

Load Tester

CCOLT

The Valen Constant Current Load Tester (CCOLT) is designed for use on larger batteries and battery systems testing their performance by applying a constant current load. Current drain, cut-off voltage and duration can be manually pre-set with the CCOLT monitoring voltage and time elapsed during a test to give an absolute and accurate result of the battery performance. The CCOLT will automatically disconnect the load once the selected cut-off voltage is reached. Tests may be downloaded via software for filing, reporting or analysing the results.

A hard protective carry case with foam insert cut to the shape of the Valen CCOLT is also available. This case is ideal for technicians who need to travel to ensure the CCOLT remains protected and undamaged.



Features

Accurate

The Valen Constant Current Load Tester (CCOLT) performs a full battery discharge test producing an accurate and absolute report on the performance of the battery under test.

Software

Easy to use software allows for data and tests from the Valen CCOLT to be stored, exported to PDF or printed for the analysis of batteries.

Flexible Range

Valen CCOLT has the ability to test an extensive range of capacities from 1A up to 100A discharge rates, or right up to 160A on the 12V version.

Test to the Fire Standard

Valen CCOLT is the preferred battery tester for testing in accordance to fire standard AS1851.2012.

Hard Protective Case

A lightweight, lockable, protective carry case is also available to protect the Valen CCOLT.



Specifications

Operating Voltage	12 to 48VDC
Battery Types	The CCOLT battery tester can test all 12V, 24V, 36V or 48V battery technologies including but limited to VRLA & LiFePO4 batteries
Battery Sizes	21Ah and above
Display	LCD Screen
Dimensions	260x220x270
Weight	7.5kg

Product Code	Measured Voltage	Max. Discharge Current
BT10004	12	420A (160A Constant)
BT10005	24	100A
BT10006	48	100A

Impedance Tester

Valen RE856

When a complete system shutdown is not an option, the Valen RE856 Battery Impedance Meter will test a range of batteries without the need to disconnect them. The Valen RE856 is the ideal solution for regular battery maintenance inspections required in many industries including high voltage systems, UPS, telecommunications and emergency back-up applications.

Featuring easily programmable software which can be adapted to suit your battery systems, the Valen RE856 has become the economical battery impedance meter of choice. A built-in comparator stores up to 99 sets of various battery types for testing and analysis. The Valen RE856 has a USB interface and a micro SD card allowing the user to store unlimited readings.



Features

Advanced Software

The advanced software for the Valen RE856 allows the user to edit and send comparator settings, download data to a spreadsheet and obtain comprehensive graphs

Instant Results

Instantaneous battery impedance results from the Valen RE856 saves the user time on site

Flexible

Flexibility of design means the Valen RE856 can test a large range of different voltages and battery technologies

Data Logging

Data logging function of up to 4800 data sets allows the user to monitor the battery condition over time and prevents unplanned battery failure

The Tester Includes:

Hard carry case, DC current clamp, test probes, test clamps, and zero board.

Advanced Accessories

Optional Valen RE856 unique probes and extra clamps allow for flexibility in battery testing (see page 67)



Specifications

Product Code	BT11015
Operating Voltage	36V to 360V
Battery Types	Valve Regulated Lead Acid (VRLA), Alkaline, Ni-Cd, Li-Ion and Ni-Mh
Display	LCD Screen
Dimensions	198x94x49
Weight	0.53kg

Impedance Tester

HIOKI 3554

Hioki 3554 allows for fast, reliable, hands-on battery impedance testing without the need to disconnect the system. The Hioki Battery Impedance Tester sets the standard for assessing the deterioration and remaining life of a battery by giving a complete diagnosis via battery resistance testing.

The specially designed pin type lead further improves testing efficiency with an L-shaped tip that allows the user to reach deep into the battery racks for an accurate terminal reading on hard to reach batteries.



Features

Robust Casing

New robust protective casing on the Hioki 3554 delivers a better ergonomic hold, extending durability in the field.

Fast Testing

Designed for fast testing of batteries, the Hioki 3554 can measure and save data in as fast as 2 seconds saving time on site.

Instant Results

Instantaneous results allow the Hioki 3554 user to diagnose battery degradation by measuring internal resistance and voltage.

Various Connections

Variety of connections for flexibility and adapting to the user's systems, the Hioki 3554 has optional clamps and probes available (see page 67).

Testing Flexibility

Hioki 3554 has the ability to test a large range of battery voltages and technologies.

Data Logging

The data logging function of the Hioki 3554 allows the user to monitor the battery condition over time.



Specifications

Product Code	BT11021
Operating Voltage	36V to 360V
Battery Types	Valve Regulated Lead Acid (VRLA), Alkaline, Ni-Cd, Li-Ion and Ni-Mh
Display	LCD Screen
Dimensions	199x132x60.6
Weight	0.94kg

Impedance Tester

Tekon 950

Designed to make technicians field service maintenance effortless, the Tekon 950 has multiple advantages over its competition. Being an impedance meter allows the Tekon 950 to produce fast and accurate results. However, these results can be transmitted to remote data holding locations using a mobile app while onsite. All results are effectively recorded and stored, and there is no risk of lost data. Tekon 950 can offer service teams more efficiency and productiveness onsite saving thousands of dollars in downtime and HR expenses.



Features

- Measures internal resistance on battery systems of up to 400V
- Measures voltages of battery systems of up to 500V
- Measures AC voltage of up to 500V (for UPS)
- Measures battery capacity
- Diagnoses ageing batteries and predicts the life span based on historical data allowing the user to time the battery replacement
- Can store historical battery results in its 8MB memory
- Auto-hold and data storage
- Prints out measurements data in reports
- Transmits measurement data to remote locations (i.e. email, server) using Mobile App



Specifications

Product Code	BT11950
Power Supply	7.2V.5.2Ah Li-ion, 12V/2.5A DC Adaptor
Data Storage	8MB
Communication	Bluetooth Ver2.1 + EDR Class2
Operating Temp./Humidity	0°C to +45°C RH 85% max.
Storage Temp./Humidity	-20°C to +60°C RH 85% max.
Compliant Standards	IEC 61010-1 CAT III 500V Pollution Degree 2, EN61326-1:2013
Display	LCD 4.0 Monographic
Dimensions	240(L) x 198(W) x 109(H)
Weight	1.4kg

Impedance Tester

Tekon 960

Designed to make technicians field service maintenance effortless, the Tekon 960 can handle virtually all high-voltage battery systems.

Being an impedance meter allows the Tekon 960 to produce fast and accurate results that can be effortlessly transmitted to remote data holding locations using a mobile app while onsite.

All results are effectively recorded and stored, and there is no risk of lost data. Tekon 960 can offer service teams more efficiency and productiveness onsite saving thousands of dollars in downtime and HR expenses.



Features

- Measures internal resistance on battery systems of up to 500V
- Measures voltages of battery systems of up to DC1000V
- Measures AC voltage of up to 600V (for UPS)
- Measures ripple voltage, current and temperature
- Diagnoses ageing batteries and predicts the life span based on historical data allowing the user to time the battery replacement
- Can store historical battery results in its 8MB memory
- Auto-hold and data storage
- Prints out measurements data in reports
- Transmits measurement data to remote locations (i.e. email, server) using Mobile App



Specifications

Product Code	BT11960
Power Supply	7.2V.5.2Ah Li-ion, 12V/2.5A DC Adaptor
Data Storage	8MB
Communication	Bluetooth Ver2.1 + EDR Class2
Operating Temp./Humidity	0°C to +45°C RH 85% max.
Storage Temp./Humidity	-20°C to +60°C RH 85% max.
Compliant Standards	IEC 61010-1 CAT III 500V Pollution Degree 2, EN61326-1:2013
Display	1024x600 pixels, 7" TFT with TSP
Dimensions	240(L) x 160(W) x 65(H)
Weight	0.9kg

Impedance Battery Tester Comparison



RE856



Hioki 3554



Tekon 950



Tekon 960

Impedance Scale	4mff - 400ff (6 range)	3mff - 3ff (4 range)	3mff - 300ff (6 range)	3mff - 300ff	3mff - 3000ff
Impedance Accuracy	31.0%	30.8%	30.8%	30.8%	
Impedance Max. Test Voltage	60V	60V	200V 400V	200V	500V
DC/V	0 ~ 60V	0 ~ 60V	0 ~ 500V	0 ~ 500V	0 ~ 1000V
AC/V	X	X	0 ~ 500V	0 ~ 500V	0 ~ 1000V
Ripple Voltage	X	X	0 ~ 5V	0 ~ 5V	
DC/A	600A	X	4A/40A/400A	4A/40A/400A/1000A	
AC/A	X	X	4A/40A/400A	4A/40A/400A/1000A	
Humidity	X	X	X	O	
Temperature	NTC (external)	NTC (external)	NTX	O	
Analyser Trend	X	X	O	O	
Analyser Change Time	X	X	O	O	
Data Record	4GB (999)	4,800 Data	8MB (100,000)	8MB (100,000)	
PC Interface	USB	Bluetooth	Bluetooth	Bluetooth, USB	
External Interface	X	Mobile App	Mobile App	Mobile App	
Auto-hold	X	X	O	O	
Auto-record	X	O	O	O	
LCD Display	Static LCD	3.5" Static	3.8" Graphic	7" TFT with TSP	
Battery	1.5V AAx6	1.5V AAx6	Li-ion 7.4V/5.4Ah	Li-ion 7.4V/5.4Ah	
Battery Life Time	5.5h		8h	8h	
Size	198 x 94 x 49	192 x 121 x 55	240 x 198 x 109	240 x 160 x 65	
Weight	530g	790g	1.4kg	0.9kg	

IBT Calibration Kits



Using the ACT Meters Intelligent Battery Testers constantly can create some wear and tear. Valen stock the Calibration Kit for a range of ACT Meters. These Calibration Kits are quick and easy to install and involve no internal adjustment of the testers.

Each kit consists of replacement plug-in leads, new front and rear labels and instructions. These Calibration Kits are the ideal maintenance fix for times when your tester may not be giving accurate battery test results.

Product Code	Description
BT19065	ACT Meters IBT Chrome Calibration Kit
BT19068	ACT Meters IBT 612 Calibration Kit

IBT Battery Tester Labels



The Intelligent Battery Tester Labels - each roll contains 250 labels with insertions for:

- Temperature
- Volts
- Ah Readings
- User Initials
- Date Tested

Size: 50 x 28mm

Product Code	Description
BT19072	Intelligent Battery Tester (IBT) - Test Result Stickers

IBT Terminal Connectors



Attaching Intelligent Battery Tester clips directly to high resistance steel bolts will produce low, inaccurate Ah readings. These connectors must be used to obtain accurate, consistent Ampere-hour (Ah) readings on recessed battery terminals.

Product Code	Description
BT19071	ACT Meters Terminal Connectors

CCOLT Protective Case



This tough, hard carry case with foam insert cut to the shape of the Constant Current Load Tester (CCOLT). This carry case is ideal for technicians who need to travel with the CCOLT tester to ensure it remains protected and undamaged.

Features include:

- Comes with a carry handle
- Lockable with padlock (padlock not supplied)
- Lightweight - 3kg without a tester
- Watertight, dustproof and crushproof
- Moulded with lightweight resin
- Double throw latches

Product Code	Description	To Suit
BT19003	CCOLT Protective Carry Case	All CCOLT Testers

Valen RE856 Replacement Parts



Using the Valen RE856 Live Circuit Battery Tester constantly out in the field can create some wear and tear on your battery tester leads.

Valen has replacement RE856 leads in stock!

We can supply your replacement probe and clamp leads.

Product Code	Description
BT19057	RE856 Clamp Leads
BT19058	RE856 Probe Leads
BT19543	RE856 Probe Pin Replacement

HIOKI 3554 Replacement Parts



Using the HIOKI 3554 Battery Tester unit constantly in the field can create some wear and tear especially on your tester leads.

Valen has replacement leads in stock and can source a variety of other HIOKI replacement parts.

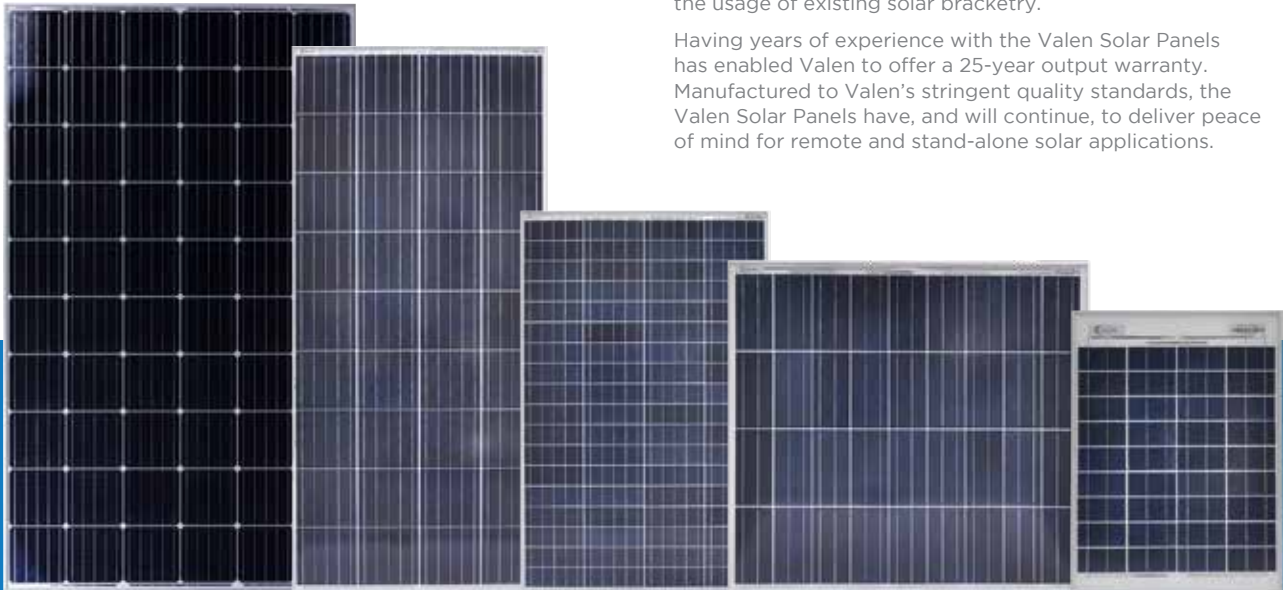
Product Code	Description
BT19079	HIOKI 3554 Measurement Probe Leads
BT19080	HIOKI 3554 Tester Probe Pin Replacement

SOLAR & POWER GENERATION

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Solar Panels



Valen Solar Panels are designed for industrial applications and cater for a wide range of stand-alone power projects. High-quality, customisation and complete system integration, with the full range of Valen products, have meant the Valen Solar Panels have fast become the solar panel of choice for critical solar applications.

Superior solar cells ensure Valen Solar Panels deliver a high level of performance, even in low light conditions, whilst maintaining an aesthetic appearance.

Customised panels are available to provide maximum efficiency and flexibility on large projects and to enable the usage of existing solar bracketry.

Having years of experience with the Valen Solar Panels has enabled Valen to offer a 25-year output warranty. Manufactured to Valen's stringent quality standards, the Valen Solar Panels have, and will continue, to deliver peace of mind for remote and stand-alone solar applications.



Features

Highly Transparent Glass

Highly transparent low-iron tempered glass ensures the Valen Solar Panels withstand high wind pressure and snow loads.

Easy Installation

Easy installation with the Valen Solar Panel's MC4 connector allowing for a quick plug and play connection.

Vandal-Resistant

Valen Solar Panel vandal-resistant version available delivering maximum protection against attacks from projectiles and harsh environments.

IEC61215 Approved

Ensures the Valen Solar Panel range is suitable for long-term operation in open-air climates. The Valen Solar Panel range is capable of withstanding prolonged exposure in harsh climates.

Accessories

Valen Solar Accessories are available. See page 76 for more details.



Specifications

Operating Temperature	-40°C to +85°C
Output Warranty	25-years
Approvals	IEC61215
Connections	900mm Fly lead with MC4 connectors

Call the team today to chat through your next Solar Project

Solar Panels

Product Code	Operational Voltage	Wattage	Dimensions (mm)			Weight (Kg)	Stocked Item
			L	W	H		
SP40612	12V	20W	470	345	25	1.95	✓
SP40649	12V	40W	775	350	35	4.40	✓
SP40686	12V	50W	665	535	35	4.75	✓
SP40723	12V	80W	775	665	35	6.15	✓
SP40538	12V	100W	1005	665	35	7.50	✓
SP40575	12V	160W	1480	665	35	11.0	✓
SP40010	24V	300W	1640	990	35	21.0	✓

Custom wattage, dimensions and connections available on request.

Do you have all of the equipment for your next solar project?

From system design, component selection and supply, to installation and ongoing support.

Valen care about your system from beginning to end. Our wide range of solar accessories allows you to have access to all the parts you need for your next installation.

Get in touch with the team from Valen for more details.

Solar Controllers

To prevent your batteries from being overcharged by a solar power system, a solar charger controller (sometimes referred to as a solar regulator or MPPT charge controller) must be used.

There are two main solar charge controller types available - these are PWM (Pulsed Width Modulation) and MPPT (Maximum Power Point Tracker). PWM and MPPT refer to the way the controller regulates the charge from the sun to the batteries.

PWM is the original method and has been around for many years, whilst MPPT is a newer and more efficient method. MPPT has been specifically designed to reduce the efficiency loss in charging batteries from solar panels.



Valen 12V/24V 30A Solar Controller



The Valen 12V/24V Solar Controller has been designed to automatically recognise system voltages minimising potential connection errors. An upgraded 3-stage PWM charging algorithm has been adopted into the controller. By applying a periodic equalising charge to the battery, the Valen PWM can effectively prevent the battery from becoming unequalised or sulphated, ultimately extending the battery's service life. The Valen 30A Solar Controller is user-friendly with dynamic interfaces ensuring convenient and intuitive operation.

Product Code	SA50755	Dimensions	160x103.5x47
System Voltage	12V/24V	Weight	0.80kg
Rated Current	30A	Suitable for	Flooded, VRLA and Lithium (LiFePO4)

Valen 12V/24V 30A MPPT Solar Controller



The Valen MPPT 30A Solar Controller continuously monitors the power generated from the connected solar system. Its ability to track the highest voltage and current values in real-time enables the solar system to charge the battery with maximum efficiency. Designed to be installed in off-grid solar systems, the Valen MPPT 30A Solar Controller coordinates the operation of the solar system, battery and load whilst functioning as the core control unit.

Free Valen Solar Controller monitoring software allows maximum convenience and minimises time spent on site, especially for remote off-grid solar sites.

Product Code	SA50246	Dimensions	238x173x72.5
System Voltage	12V/24V	Weight	2.0kg
Rated Current	30A	Suitable for	Flooded, VRLA and Lithium (LiFePO4)

Victron BlueSolar 10A/75V MPPT Solar Controller



The Victron blue SmartSolar MPPT charger gathers energy from your solar panels and stores it in your batteries.

Using the latest, fastest technology, BlueSolar maximises this energy harvest, driving it intelligently to achieve full charge in the shortest possible time. In addition, BlueSolar maintains battery health, extending its life.

The SmartSolar charge controller will even recharge a severely depleted battery. Moreover, it can operate with a battery voltage as low as 0 Volts, provided the cells are not permanently sulphated or otherwise damaged.

Product Code	SA50242	Dimensions	100x113x40mm
System Voltage	12V/24V	Weight	0.5kg
Rated Current	10A	Suitable for	Flooded, VRLA and Lithium (LiFe PO4)

Victron BlueSolar 15A/75V MPPT Solar Controller



The Victron blue SmartSolar MPPT charger gathers energy from your solar panels and stores it in your batteries.

Using the latest, fastest technology, BlueSolar maximises this energy harvest, driving it intelligently to achieve full charge in the shortest possible time. In addition, BlueSolar maintains battery health, extending its life.

The SmartSolar charge controller will even recharge a severely depleted battery. Moreover, it can operate with a battery voltage as low as 0 Volts, provided the cells are not permanently sulphated or otherwise damaged.

Product Code	SA50243	Dimensions	100x113x40mm
System Voltage	12V/24V	Weight	0.5kg
Rated Current	15A	Suitable for	Flooded, VRLA and Lithium (LiFe PO4)

Remote Monitoring Available

Remote monitoring technology is available offering valuable, usable data from the system viewable on other communication devices providing you with critical answers about your system's health, performance and efficiency.

Contact us with your system details and see how you can include remote monitoring into your next project.

Call the team today to discuss the full Victron range of Solar Controllers

Victron

Solar Charge Controllers

A solar charger gathers energy from your solar panels, and stores it in your batteries.

Victron BlueSolar maximises this energy-harvest, driving it intelligently to achieve full charge in the shortest possible time. BlueSolar maintains battery health, extending its life.

The SmartSolar charge Controller has Bluetooth Smart built-in, the wireless solution to set-up, monitor, update and synchronise SmartSolar Charge Controllers making it even easier to optimise your solar investment.



SmartSolar 100/30 MPPT

Product Code	SA50231	Dimensions	130x186x70mm
System Voltage	12/24V Auto Select	Weight	1.3kg
Rated Current	30A	Suitable for	Flooded, VRLA and Lithium (LiFe PO4)



SmartSolar 150/70 MPPT

Product Code	SA50204	Dimensions	215x250x95mm
System Voltage	12/24/48V Auto Select	Weight	3.0kg
Rated Current	70A	Suitable for	Flooded, VRLA and Lithium (LiFe PO4)



SmartSolar 250/100 MPPT

Product Code	SA50202	Dimensions	246x295x103mm
System Voltage	12/24/48V Auto Select	Weight	4.5kg
Rated Current	100A	Suitable for	Flooded, VRLA and Lithium (LiFe PO4)

Victron Solar Accessories



These are 3 ways the Victron Solar systems can be monitored, Colour Control GX, VictronConnect App and Victron Remote Management Portal.

Call the team today to chat through your next Solar Project



Colour Control GX

The Victron Color Control GX is the communication-centre of your installation. It offers at-a-glance live information and lets you control all products connected to it. Full system control is accessed using the Victron Remote Management Portal. At a single touch, the Victron Color Control GX provides an instant overview of your system. You can view; battery state of charge; present power consumption; power harvest from PV and power provision from mains/generator.



Victron Connect App

Use the VictronConnect App to configure, monitor, update and diagnose your Victron product. Available for Android, iOS, Windows, and macOS X. It can connect to Victron products via Bluetooth, USB and WiFi/LAN/Internet. Easily control the shore power input current limit or switch on your inverter using the VictronConnect app. This is an ideal entry-level user interface for a complete RV or Marine Victron system.



Victron Remote Management Portal

Remotely monitor Victron equipment all over the world. Victron Remote Management is a free service provided by Victron Energy to remotely monitor electrical equipment all over the world

Valen ModX Pre Engineered Modular Solar Systems

Valen ModX is the brainchild of accumulated years of experience supporting clients with their remote power requirements. As the world continues to evolve into the AI space, power in remote locations is becoming increasingly essential.

Valen ModX is designed utilising a tried and tested range of Valen core products, allowing the ModX to perform in perfect synchronisation.

Valen EnduroGel battery system, Valen Industrial Field Cabinets, Valen Solar Panels and Victron MPPT Solar Controllers all come standard, with optional extras able to be added to retrofit to your project requirements.

ModX is modular, maintenance-free and easy to install and operate making it an ideal solution for the remote high-temperature regions of Australia.



Valen ModX4 solution provided for customer in regional QLD for remote radio monitoring

Call the team today to discuss your next project

Advantages of ModX

- Australian made and engineered means product support and spares readily available
- All components under 1 tonne for easy transportation
- Quick installation as no ground penetration required on ModX4 and ModX6
- Portable system structure available as an option for sites with changing requirements
- Modular systems meaning they can be expanded as the need arises
- Solar panels are able to be installed at ground level minimising the need for WHS equipment
- Adjustable solar panels for use in a wide variety of locations
- Designed and engineered in-house
- Factory-tested prior to delivery

Optional Extras

Customise your system to your site. Valen ModX optional extras allow you to ensure your system is ready to go for challenging site locations.

- DC Generator (3.5kW suggested) with External Fuel Tank
- Wind Turbine 24/48V 220W
- Larger Industrial Field Enclosures
- Upgrade to Cyclonic Wind Rating
- Precast Concrete Pads
- DC-DC Converter
- Inverter
- External IP Boards
- Upgrade to Lithium Batteries
- Remote monitoring for easy tracking of multiple remote sites
- Skid-mount version available



Valen Solar Panel Pole Mount Brackets

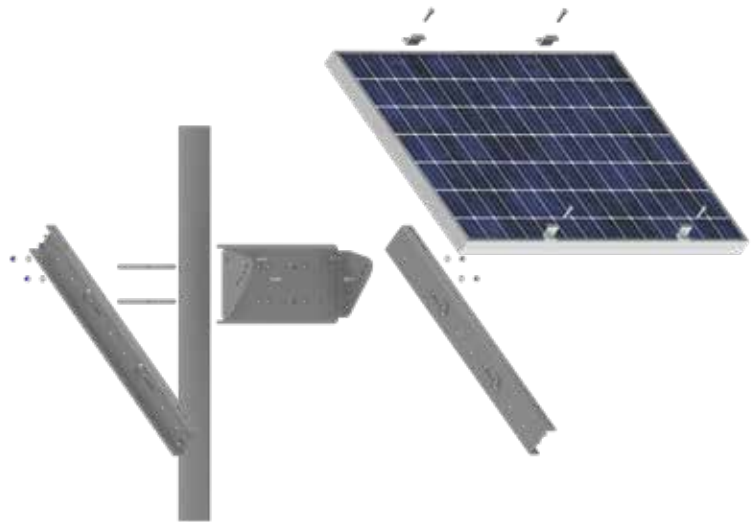
The post mounts solar panel brackets are flexible and durable. Ideal for remote off-grid applications such as water pumps or small residential and commercial systems.

The Valen solar bracket range has been developed to provide reliable and easy to install solar panel mounting option that can ensure;

- Maximum efficiency for your panels by having changeable angles to suit different locations.
- Wind certification which reduces your liability and risk.
- Streamline packages aimed to cover all your sizing needs, either panel size or pole size.
- Simplistic installation, reducing onsite labour costs and downtime



Solar Panel Pole Mount Brackets Specifications



Size	Code	Pole Size	Solar Panel Size		
			Panel Height	Panel Width	Panel Weight
SPB VS*	SB60101	37- 80 OD	215-357mm	345-775mm	9kgs Max
SPB VM*	SB60102	80 - 150 OD	540-682mm	515-1005mm	14kgs Max
SPB VL	SB60103	80 - 150 OD	540-682mm	890-1500mm	14kgs Max

*Optional extra pole clamps are available; SPB VS 80-150, SPB VM 37-80 OD. All brackets come with four pre-set drilled angles at 15°, 30°, 45°, 60°

Certified Installation Angle:

- 0 - 60° wind region A, in Australia and New Zealand
- 0-30° wind regions B and C, in Australia and New Zealand
- 60° in alpine regions, in Australia and New Zealand

Visit www.valen.com.au for [wind certificate](#) and or how to determine your [wind region](#).

Installation: Brackets can be installed, as either top mount or side mount (Refer to I&O manual)

Material: Frame; galvanised steel - Fixings; zin, galvanised steel, aluminium

Design life: 25 years

Maximum installation height: 5m (can be installed higher however this will void wind certification)

Side Mount



Top Mount



*SPB VL comes with extra horizontal strut (as shown in Top Mount Photo)

Roof Mounting Systems

EzRack

PV-ezRack SolarRoof is a roof-mounting solution suitable for most types of pitched and flat roofs. Using the innovative PV-ezRack Rail, Z-modules and standard roof hooks, PV-ezRack SolarRoof has become one of the most versatile rooftop solutions in the world, delivering a safe and cost-effective solution to installers.



Features

Easy Installation

Our versatile rail, 2-module and splice kit eliminates the need for onsite cutting, making PV-ezRack SolarRoof a safe and cost effective PV mounting system.

Versatile Application

With a full range of roof hooks, PV-ezRack SolarRoof is suitable for most roofing types, including pitched tile roofs, metal roofs, concrete roofs and even slate roofs.

Great Compatibility

Designed as a universal PV mounting system, PV-ezRack SolarRoof is compatible with most of the major framed and frameless PV modules on the market.

High Quality

Strict quality control over materials and finished products ensures optimum strength and long life for your installation.

10 Year Warranty

Valen provides a 10 year product warranty for your peace of mind.



Specifications

Installation Site	Pitched or flat roof
Applicable Roof Cladding	Most Claddings
Roof Slope	Up to 60°
Max. Building Height	Up to 20m
Wind Load	80m/s
Snow Load	1.4kN/m2
Applicable Module	Framed or frameless
Module Orientation	Landscape or portrait
Standards	AS/NZS 1170
Material	Anodised aluminium
Warranty	10 years

Call the team today to chat through your next Solar Project

CASE STUDY

Turnkey Solutions by Valen

Husqvarna

Situation

Fueled by a passion for innovation since 1689, Husqvarna provides professional forest, park and garden products. Performance and usability meet safety and environmental care in our leading-edge innovations, where battery solutions and robotics lead the way.

The team at Husqvarna wanted to expand their capability into providing robotic lawn mowing solutions to commercial properties such as cemeteries, golf courses and wineries, and domestic and residential properties.

Solution

Valen worked with Husqvarna to design a turnkey solution. Utilising a number of quality Valen products, the Valen team developed a complete solar kit with a single part number for ease of reordering. The kit needed to be created in a way that allowed it to be carried to site and installed without heavy machinery. The kit features Valen products: 24 Volt 100Ah ENLiFEN Lithium Battery, Valen Solar panels, enclosure to house battery and Victron inverter and solar charge controller.

Outcome

Now property owners and managers of larger commercial and special-use properties have an option to use an automated mowing system that is tested and can be ordered simply.



Other Solar Panel Bracket Sizes Available

Valen have further sizes available on request as well as quad, dual and ground mounts.

Contact us on the below details with your system requirements and we will find the perfect match for your project.

Solar Panel Mounting Systems

Post Mount

These post mounts, solar panel brackets are flexible and durable designs to mount from one to eight panels per post. It's ideal for remote off-grid applications such as water pumps or small residential and commercial systems. The panel tilt is easily adjustable between 10° and 60° throughout the year. Hassle-free mounting thanks to patented components. The combination of high-quality aluminium, stainless steel and galvanised steel components make this a robust, reliable system with excellent corrosion resistance.



- Wind loads to AS/NZ1170.2:2011 Amendment 3-2012
- Wind terrain categories 2, 3 and 4
- Wind average recurrence interval of 100 years - for ultimate state, 20 years - serviceability
- Wind region A, B, C and D
- Steel yield strength 300MPa, aluminium 240MPa
- Fits solar panels up to: 1.65m(L) x 1m(W)

Product Code	Stocked Item
SB61732	✓
SB61733	✓
SB61734	✓
SB61735	✓
SB61736	✓

Accessories



Master Tube

The master tube connects to the adjustable tube and steel cap. It is a robust galvanised steel profile and holds the angle brackets or the landscape tubes with U-bolts.



ST-rail

Specifically developed to achieve larger spans, the design of the aluminium standard rail enables faster installation. The ST-rails have two patented Z-Module channels with one at top for panel mounting and the second on side which connects to the PostMount-A structure.



Inter and End clamps

Using the patented Clenergy Z-module, PV-ezRack Inter and End clamps offer a simple, easy to use and robust fixing of PV panels of any size. Compatible clamps for thin film modules are also available.



Post

This is a steel post with the outside diameter of 102mm (wall thickness 6mm), which is embedded in to concrete. It is also available with welded mounting plate (flange).



Steel Cap

The steel cap sits on top of the post and connects the adjustable tube to the master tube allowing easy adjustment between the different tilt angles.

* More information can be provided for each bracket size, and wind ratings on locations.

Noark

Circuit Breakers

Designed specifically for PV applications, the Noark Electric range of miniature load circuit breakers, are non-polarised and available in 2 and 4 pole designs. The 4 pole design is already looped internally, saving time in wiring and minimising errors.

The Noark PV Load Circuit Breakers also feature Curve K Protection which allows them to manage a high PV module perceptual load and photovoltaic line system while having a higher impact resistant current ability Tripping characteristic: instantaneous tripping range(14-20)In

Relevant Standards & Approvals that Noark miniature load circuit breakers comply with are; EC/EN/AS60947-2, GB14048.2, SAA101238EA.



Description

Circuit Breaker	360V DC 10 Amp
Circuit Breaker	360V DC 16 Amp
Circuit Breaker	360V DC 20 Amp
Circuit Breaker	360V DC 25 Amp
Circuit Breaker	360V DC 32 Amp
Circuit Breaker	360V DC 40 Amp
Circuit Breaker	360V DC 50 Amp
Circuit Breaker	360V DC 63 Amp



Noark

Battery Bank Isolators

Noark's range of moulded case circuit breakers (MCCB) provide high current breaking capabilities for DC circuits. Used primarily as battery banks isolators, these MCCBs provide a more serviceable approach to protection than standard NH fuse bases.

Features:

- 5 frame sizes - 80A to 800A
- High breaking capacity
- Installation flexibility
- Field installable accessories
- Certified to EN 60947



1-6kVA Rack / Tower Online UPS's

Valen stock a range of UPS (Uninterruptible Power Supply) units suitable for many applications such as communications and medical.

A UPS is, very simply, a power conditioner with a battery. By adding the battery, it is possible to offer protection against power failure and blackouts.

Valen can also offer support and technical assistance for customised and project-based UPS systems!

Applications include:



Comms



UPS



Emergency
Lighting



Security



Fire



Hospitals
& Medical



Mining



Airports



Offices



Rail



Factories

**Contact the Valen team to discuss
your next Energy Project**





Eco Series Line Interactive UPS

- Online UPS 1-3kVA, 6-10kVA
- Pure sine Wave inverter
- Ability to either be a tower or online
- Internal batteries
- Ability to add remote monitoring
- Ability to add up to 4x external battery packs

Product Code	Voltage	Dimensions (mm)			Stocked Item
		L	W	H	
PS80029	600V	95	300	140	✓
PS80030	1000V	225	125	380	✓
PS80031	1400V	125	380	225	✓
PS80033	2200V	198	158	380	✓



Enduro Series Online UPS with Standard Runtime

- Online UPS
- Pure sine Wave inverter
- Working temp of -37degC to +74degC
- No internal batts, so flexibility of adding your own battery capacity to meet your need
- Remote monitoring ability via web browser
- Programmable dry contact

Product Code	Voltage	Dimensions (mm)			Stocked Item
		L	W	H	
PS80058	1000V	440	430	86.5	✓
PS80059	2000V	440	600	86.5	✓
PS80060	3000V	440	600	86.5	✓
PS80061	6000V	443	580	217	✓



Vanguard Series Tower Online UPS

- UPS's come without internal batteries, internal batteries replaced with a large charger to accommodate larger battery banks and longer run times
- Pure sine Wave inverter
- Available in 1,2,3,6 & 10kVA
- Rack mount or tower options
- Talk to Valen Power about sizing up the battery bank to suit your UPS
- Compatible with all Valen Power batteries include the LiFePO4

Product Code	Voltage	Dimensions (mm)			Stocked Item
		L	W	H	
PS80037	1000V	152	420	237	✓
PS80039	2000V	225	420	358	✓
PS80041	3000V	225	420	358	✓

DC Diesel Generators

Compact DC diesel current generators designed to work with a storage battery bank.

Compact, quiet and virtually unbreakable, these generators are built tough for any environment or application. They are ideal for hybrid power plants, solar power backup and telecommunications.

Both of these DC diesel generators have remarkable fuel economy with using 22% less fuel than any other conventional engine and uses 44% less fuel to charge your batteries



Features

- Quiet and compact
- Remarkable fuel economy
- Variable engine speed
- Water-cooled low-speed engine
- Direct-drive water-cooled alternator
- Charges any battery type
- Robust design
- Easy maintenance
- 2-year limited warranty

Ideal for:

- Hybrid power plants
- Solar power backup
- Telecommunications



Specifications

	3.5KW 24/48V	6.0KW 48V
Portable	Yes	Yes
Operation	Automatic	Automatic
Power	3.5kW @ 28V	6.0kW @ 58V
Voltage	24/48V DC	48V DC
Fuel	Diesel	Diesel
Dimensions	630(L) x 490(W) x 524(H)mm	1130(L) x 625(W) x 795(H)mm
Weight	95kg	205kg

More sizes available. Contact us on the below details to discuss your requirements

Wind Turbine

The lightweight and powerful wind turbine has been developed in direct consultation with leading wind energy experts and off-grid customers. Seamlessly integrated with existing infrastructure, they enable the transition from diesel power generation to cheaper, more independent, safe and environmentally friendly wind power, overnight.

This wind turbine is designed in Australia for even the toughest off-grid conditions.



Features

- Precision engineered carbon fibre composite blades
- Breakthrough diffuser technology maximises the wind resource
- Marketing leading 220W output
- Quiet and powerful
- Plug and Play integration with 24 and 48VDC systems
- Ideal for telecommunications, mining and utility markets



Specifications

Rated Power	220W
Rated Wind Speed	11m/s (40km/h)
Peak Power	1000W (17m/s)
Total Diameter	920mm
Output Voltage	24V/48V
Mass	18.5kg
UV Protection	20 Years
Yaw	Passive Yaw System

More sizes available. Contact us on the below details to discuss your requirements

ENCLOSURES, CABINETS & RACKING

CONTENTS

IP66 19" DATA RACKS.....	104 - 105
FIELD CABINETS	106 - 107

IP66 19" Data Racks

Valen's IP66 19-inch Data Racks enclosures are designed for heavy-duty outdoor applications to house sensitive data network equipment in harsh environments. They are suitable for internal and external installations. All Valen's enclosures are built to precision in Europe ensuring consistent high-quality standards.

Valen's data rack enclosures come in a range of sizings; 16RU, 24RU, 32RU and 42RU.

A variety of options and accessories are also available to suit the Valen IP66 19" Data Rack enclosures.



Features

Data Rack Unit Sizes

There are a variety of the Valen IP 66 19" data rack available; 16RU, 24RU, 32RU and 42RU.

Protection

Valen's IP66 19" data rack complies with IP66 IK10, NEMA 4 and standards AS60529, EIA-310-D.

Data Rack Body

The robust monoblock body is 1.5mm galvanised steel sheet. Precision automated manufacturing equipment ensures accuracy and consistently high-quality. Flat face sealing surfaces increase seal life. A galvanised steel gland plate is incorporated into the bottom face.

Data Rack Door

The surface-mounted door is 1.5mm galvanised steel sheet. It incorporates concealed removable hinges with captive pins and designed for a 110° opening. Each door contains integral cable management rail studs and an M6 earth stud. The cable management rails are removable to provide more space for control components.

Data Rack Seal

A high-quality full perimeter seal provides excellent sealing over a long life. It is machine applied Polyurethane foamed in place (FIP).

Data Rack Lock

3 point locking system with key-lock swing handle. A full range of locking solutions are available upon request.

Gland Plate

Gland plates incorporated into the bottom face of the enclosure for cable management. Provided with gaskets and fasteners; the size and quantity vary according to enclosure size.

Surface Treatment

UL approved epoxy-polyester powder-coated with a textured finish; 80-120 micron average thickness. The standard electrical enclosure colour is RAL7035. A full range of other colour options is available upon request.

Product Code	Enclosure Size (mm)			Size	No. of U (RU)
	H	W	D		
DRE IP 850x600x400	850	600	400	19"	16RU
DRE IP 850x600x600	850	600	600	19"	16RU
DRE IP 850x600x800	850	600	800	19"	16RU
DRE IP 1200x600x400	1200	600	400	19"	24RU
DRE IP 1200x600x600	1200	600	600	19"	24RU
DRE IP 1200x600x800	1200	600	800	19"	24RU
DRE IP 1600x600x600	1600	600	600	19"	32RU
DRE IP 2000x600x600	2000	600	600	19"	42RU
DRE IP 2000x600x800	2000	600	800	19"	42RU

Valen Cabinets & Enclosures Customisation Options

Customisation allows Valen to provide a cabinet or enclosure designed and engineered to meet specific project requirements.

2D drawings are available for approval on all Valen customised enclosures, and 3D models can be accessed should this be required. Valen can handle one-off prototype runs as well as large scale production. Customisation options include the following range of accessories and fittings:

- Non-standard shapes and sizes,
- Holes and cut-outs,
- Sloping roof rain hoods fitted,
- Sun shields,
- Inner doors fitted,
- Viewing windows,
- Plan Pockets,
- Shelves,
- Custom paint or powder-coat colour including anti-graffiti coating,
- Locking systems fitted,
- LED Lighting fitted,
- Ventilation fitted,
- Cable glands fitted, and
- Custom mounting brackets (wall brackets, pole mount brackets, stands).

Field Cabinets

Valen's plinth-mounted Field Cabinets are designed to house sensitive data network and electrical equipment for a variety of heavy-duty outdoor applications.

These cabinets compliment Valen's battery and charger solutions to a range of industries, including road and transportation management and remote monitoring.



Features

Protection

Valen's field cabinets comply with IP66 IK10, NEMA 4 (excluding cutouts for fans/filters, vent hoods, covering fan/filter cutouts IP65) as well as standards IEC62208, IEC/EN/AS60529, IEA-310-D.

Field Cabinet Body

The robust monoblock body is fabricated using 2.0mm galvanised steel sheet. The body is fitted with rain hood/sunshield, plinth, vent hoods and 4x lifting eye bolts. Flat face sealing surfaces are provided to increase seal life. A 3.0mm galvanised steel split gland plate is also incorporated into the bottom face. Four cutouts 125mm x 125mm are supplied to house fans and filters, and each are covered with removable vent hoods. Precision automated manufacturing equipment ensures accuracy and consistent high-quality (fans and filters ordered separately).

Field Cabinet Doors

The front and rear doors are fabricated using 2.0mm galvanised steel sheet and are designed to provide flush recessed mounting to prevent vandalism and unauthorised access. The doors incorporate concealed removable hinges with captive pins and designed for a 110° opening and are provided with heavy-duty door stays.

19" Data Rack Rails

Front and rear 19" data rack rails fabricated from 1.5mm galvanised steel sheet.

Field Cabinet Seals

High-quality Polyurethane foamed in place (FIP) full perimeter door seals provide excellent sealing over a long life.

Field Cabinet Locks

Each door includes a 3 point locking system with key-lock swing handle. A full range of locking solutions are available upon request.

Gland Plate

3mm aluminium split gland plates incorporated into the bottom of the enclosure for cable management.

Surface Treatment

UL approved epoxy-polyester powder-coated with a smooth finish; 80-120 micron average thickness.

Colour

The standard field cabinet colour is T33 Smoke Blue. A full range of other colour options are available upon request.

Product Code	Enclosure Size (mm)			Colour	No. of U (RU)
	H	W	D		
FC IP 1375x750x620	1375	750	620	T33 Smoke Blue	24RU
FC IP 1375x750x800	1375	750	800	T33 Smoke Blue	24RU
FC IP 1675x750x620	1675	750	620	T33 Smoke Blue	30RU
FC IP 1675x750x800	1675	750	800	T33 Smoke Blue	30RU
FC IP 1975x750x620	1975	750	620	T33 Smoke Blue	36RU
FC IP 1975x750x800	1975	750	800	T33 Smoke Blue	36RU
FC IP 2275x750x620	2275	750	620	T33 Smoke Blue	42RU
FC IP 2275x750x800	2275	750	800	T33 Smoke Blue	42RU



Accessories

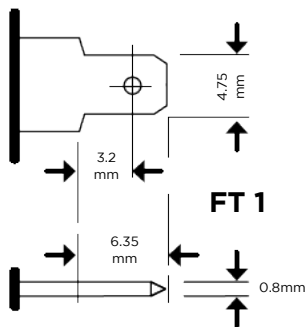
Field cabinet accessories available include:

- Shelf to suit Field Cabinet (White)
- Heavy Duty Shelf to suit 750W X 800D (250kg max. load)
- Laptop Drawer to suit Field Cabinet (White)
- Device Plate to suite 1375H X 620D Field Cabinet

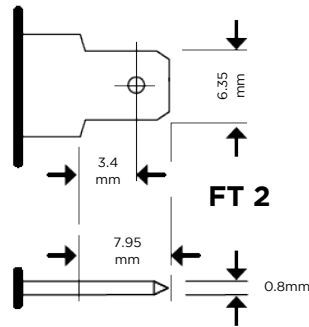
Other accessories are available upon request, contact us on the details below to discuss your next project.



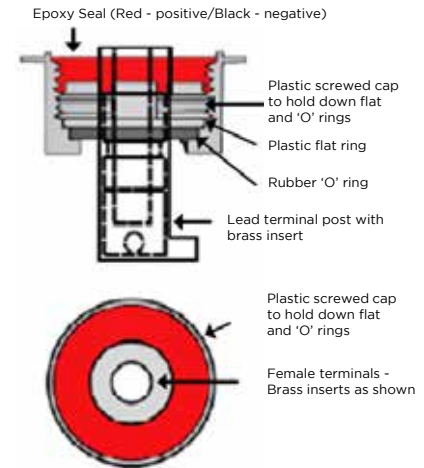
F1 Terminal



F2 Terminal



Insert Terminal



Flat Plate Terminal

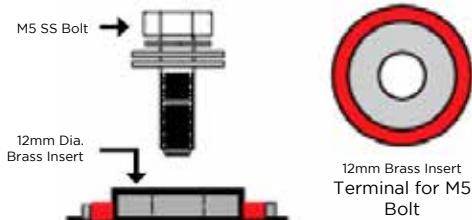


Positive
11mm high x 5.5mm wide

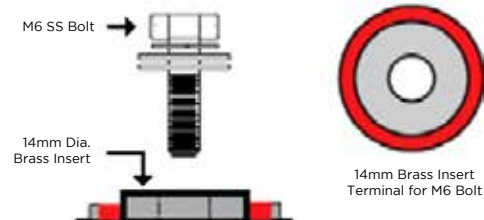


Negative
14mm high x 5.5mm wide

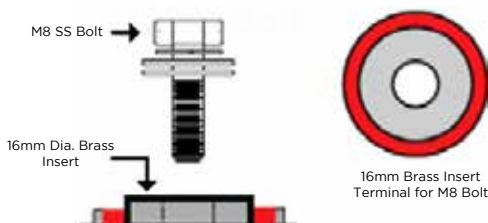
M5 SS Bolt



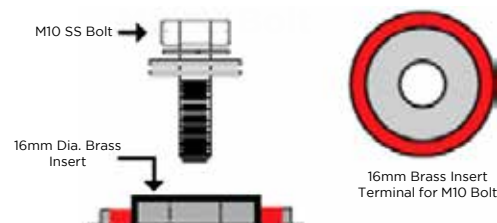
M6 SS Bolt



M8 SS Bolt



M10 SS Bolt





Wow Customers
through Service

Move Fast &
Remain Focused
to Get Results

Upbeat Positive
Attitude

Challenge the
Status Quo

Play as a Team

Our Team is Ready to Deliver!

✓ Making the Promise ✓ Delivering the Promise ✓ Keeping the score



Complete Solution

Valen is an End-to-End Solution Provider; so we offer you a complete system solution! Being able to offer the complete solution we save you the hassle of having to search for additional suppliers. From design to supply, we are with you every step of the way!



Innovative Products

At Valen, we take pride in being original, so we have an exclusive range of products for our clients. These unique products and innovation ensure you stay at the front of an ever-changing market.



Personalised Training

Our qualified team of experts are readily available to provide world-class training to your team. Thus, ensuring you remain up to date with the latest battery technologies, safety and testing.



Quality Control

With our in-house quality control team and state of the art facilities, we ensure the delivery of a unique product that meets and goes beyond your expectations.



Technical Support

Our support doesn't stop once you invest in our products; with our experienced and skilled technical team, we assist you even after-sale. If you have any questions about your System or Products purchased, our technical team have the answers.



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