

# **MODUFLEX+**

### **Hybrid 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

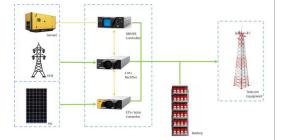




# **MODUFLEX+** SPECIFICATIONS

## Applications

- Remote Sites
- Macro cell BTS
- Microwave
- LTE / WiMax
- FTTX
- Broadband Access
- Optical Fibre Transmission System



MODEL	Moduflex+
INPUT SPECIFICATIONS	
Input Configuration	1-Phase 230Vac; 3-Phase 400Vac+N (Y)
Power Factor	≥ 0.99
Frequency	45Hz to 65Hz
THD	< 5% (50% to 100% load)
Input Protections	Soft Start
	Surge Protection
	Overvoltage Protection
PV Input	
Solar Input	85-420Vdc
Input from Solar Array	4 x Connectors (20A)
Input Isolation	4 x 20A 2P MCB
Surge Protection	Included
OUTPUT SPECIFICATIONS	
Nominal Output Voltage	48.0Vdc
Output Power	Up to 24kW
Efficiency	>97%
BATTERY DISTRIBUTION	
Battery Low Voltage Disconnect	BLVD @ up to 500A
Battery Distribution	4 x 27mm width 80A-125A 1P MCB (Configurable)
LOAD DISTRIBUTION	
Low Low Voltage Disconnect	LLVD is optional
Load Distribution	12 x 18m width 6A-63A 1P MCB (Configurable)
CONTROLLER and RECTIFIER TYPE	
Power Module	ETR <sup>+</sup> Rectifier ETS <sup>+</sup> Solar Converter modules
Controller Module	SMU01 (refer to datasheet)
ENVIRONMENTAL	
Operating Temperature Range	-20°C to +75°C (de-rates above 55°C)
Storage Temperature Range	-40°C to +70°C
Relative Humidity	Operating: 5% to 98% RH non-condensing
	Storage: 0% to 98% RH non-condensing
Acoustic Noise	<58dB @ full load, 40°C
PHYSICAL	
Dimensions WxDxH	482 x 390 x 311.15 (mm) (9U)
Net Weight	~25kg (excluding rectifier, Solar Converter modules)
DESIGN STANDARDS	
Electrical Safety	EN/IEC60950
EMC	EN55022/CISPR22 Class B, EN61000-4-2/-3/-4/-5/-11

**Technical Specifications** 

Specifications subject to change without notice.









AUSTRALIA 1300 734 253 sales@valen.com.au www.valen.com.au NEW ZEALAND 0800 734 253 sales@valen.co.nz www.valen.co.nz