

ETS + 3248

Efficient Trusted Sustainable

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.



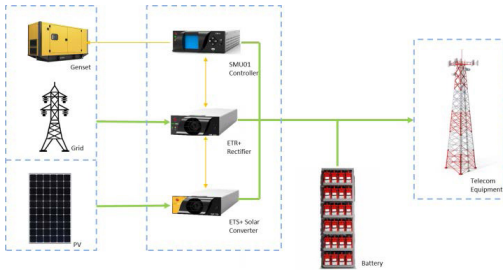
FEATURES:

- 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

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SPECIFICATIONS

Hybrid System Architecture



Hybrid System Power Core



Technical Specifications

MODEL	ETS ⁺ 3248
Capacity	3200W
DC INPUT	
Voltage Range	85Vdc to 430Vdc
MPPT Range	100Vdc to 380Vdc
Voltage Startup	120Vdc
Input Protection	Varistors for transient protection, reverse Polarity Low Voltage and high voltage Shutdown with hysteresis
DC OUTPUT	
Output Voltage	53.5Vdc (adjustable 43Vdc to 58Vdc)
Output Power (Maximum)	3200W @ nominal input
Output Current (Maximum)	62.5A @ 51.2Vdc
Peak Efficiency	97%
Current Sharing	<= ±5% of max current from 20% to 100% load
Static Voltage Regulation	±0.6% from 10% to 100% load
Dynamic Voltage Regulation	±5% for 10%-90% or 90%-10% load variation, regulation time <50ms
Hold Up Time	>20ms; output voltage >43.5Vdc @ 1500W
Ripple and Noise	<150mVp-p, 20MHz bandwidth <2mVrms psophometric
Output Protection	Overvoltage shutdown; hot plug-in, inrush current limiting; high temperature protection; short circuit proof
CONTROL and MONITORING	
Solar Converter Alarm and Signaling	High & low mains shutdown, high temperature shutdown, converter failure, overvoltage shutdown, fan failure, communication failure
Visual Indications	Alarms - RED Warning - YELLOW Normal operation - GREEN
OTHER SPECIFICATIONS	
Isolation	Input to Output: 4.2kVdc, Input to Earth: 2.1kVdc, Output to Earth: 0.7kVdc
Cooling	Fan-cooled, front to back airflow
Fan Speed	Regulated by temperature and output power
MTBF	> 300,000 hrs @ 25°C
ENVIRONMENTAL	
Operating Temperature Range	-40°C to +75°C (de-rates above 45°C)
Storage Temperature Range	-40°C to +85°C
Relative Humidity	Operating: 5% to 95% RH non-condensing Storage: 0% to 99% RH non-condensing
Acoustic Noise	<58dB @ full load, 25°C
PHYSICAL	
Dimensions WxDxH (mm)	109 x 310.5 x 41 (1U)
Net Weight (kg)	1.7
DESIGN STANDARDS	
Electrical Safety	EN/IEC60950-1, EN/IEC62109-1
EMC	EN55022/CISPR22 Class B, EN61000-6-1/-2/-3/-4
AC Harmonics	EN61000-3-2
AC Flicker and Fluctuations	EN61000-3-3
Others	CE, RoHS compliant

Specifications subject to change without notice.