



ETS+ 3248

Efficient : Trusted : Sustainable

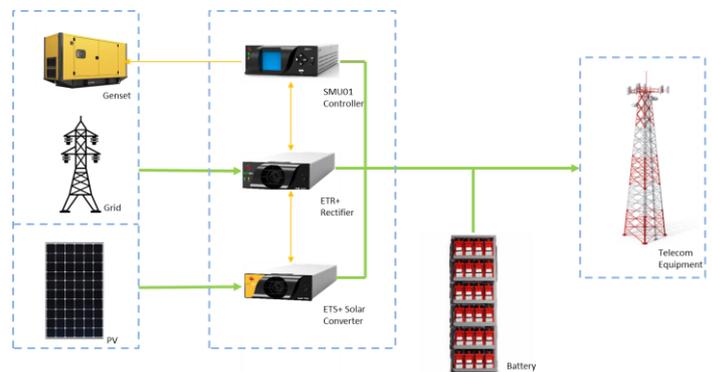
PRODUCT DESCRIPTION

The fully Digital Controlled ETS+ 3248 Solar Converter module is designed with MPPT algorithm, provides real time power tracking and peak efficiency of 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.

KEY FEATURES

- **MPPT**
Maximum Power point Tracking
- **Highly Efficient @ 97% peak**
Reduces losses and lowers operating costs
- **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



Hybrid System Architecture



Hybrid System Power core

TECHNICAL SPECIFICATIONS

PART NUMBER	392010.200
Capacity	3200W
DC INPUT	
Voltage Range	85Vdc to 430Vdc (Nominal @ 210Vdc to 360Vdc)
MPPT Range	100Vdc to 380Vdc
Voltage Startup	120Vdc
Maximum Input Current	Max \leq 18.0 Arms
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 with nominal input
Peak Efficiency	97%
Current Sharing	\leq \pm 5% of max current from 20% to 100% load
Static Voltage Regulation	\leq \pm 0.6% from 10% to 100% load
Dynamic Voltage Regulation	\leq \pm 5% for 10%-90% or 90%-10% load variation, regulation time <50ms
Hold Up Time	>20ms; output voltage >43.5Vdc @ 1500W
Ripple and Noise	\leq 150mVp-p, 20MHz bandwidth \leq 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 55°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	\leq 58dB @ full load, 25°C
PHYSICAL	
Dimensions WxDxH (mm)	108 x 325 x 41 (1U)
Net Weight (kg)	\leq 1.7
DESIGN STANDARDS	
Electrical Safety	EN/IEC62368-1,EN/IEC62109-1
EMC	ETSI EN 300 386 V1.6.1
Others	CE, RoHS compliant

Due to continuous product development, specifications are subject to change without prior notice

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