



ETR+ 1248

Efficient : Trusted : Reliable

PRODUCT DESCRIPTION

The fully Digital Controlled ETR+ 1248 rectifier module is designed and optimized for demanding power needs across different applications and industries.

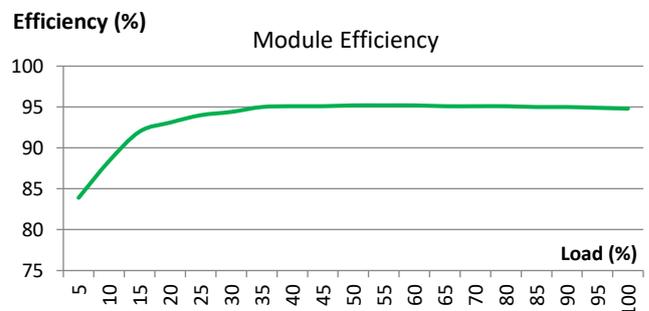
The modularity design, coupled with its cost effectiveness package, power density and reliability, ensures the overall availability of the system solution.

KEY FEATURES

- **Fully Digital Controlled**
Reduces component count and improves reliability
- **Modular, Scalable and Hot Swappable**
Flexible installations
- **High Power Density**
Reduces footprint
- **Highly Efficient @ up to 95%**
Reduces losses and lowers operating costs
- **Front-to-back Airflow**
Unobstructed scalability of shelves
- **Excellent EMC Performance**
Lower interference and excellent susceptibility
- **Wide Input Voltage Range**
Continued operation in demanding grid conditions
- **Wide Temperature Range**
Applications in harsh climatic conditions
- **Compliant with Global Standards**
Delivers quality, performance and reliability in power solutions

APPLICATIONS

- Macro cell BTS
- Microwave
- LTE / WiMax
- FTTX
- Broadband Access
- Optical Fibre Transmission System
- IDC (Internet Data Centres)



TECHNICAL SPECIFICATIONS

MODEL		ETR⁺ 1248
Capacity	1160W	
AC INPUT		
Voltage Range	90Vac to 290Vac (Nominal @ 176Vac to 275Vac)	
Frequency	45Hz to 65Hz	
Maximum Input Current	Max 7Arms @ 185Vac (full load)	
Power Factor	>0.99 @ rated input and ≥50% load	
Input Protection	Varistors for transient protection, Mains Fuse for both input lines	
	Shutdown @ > 305Vac with hysteresis	
DC OUTPUT		
Output Voltage	53.5Vdc (adjustable 43Vdc to 58Vdc)	
Output Power (Maximum)	1160W @ nominal input	
Output Current (Maximum)	20A @ 58Vdc with nominal input	
	24A @ 48Vdc with nominal input	
Peak Efficiency	up to 95%	
Current Sharing	≤ ±5% of max current from 50% 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; rated output voltage @ 1160W	
Ripple and Noise	<200mVp-p, 20MHz bandwidth	
	<2mVrms psophometric	
Output Protection	Overvoltage shutdown; hot plug-in, inrush current limiting; high temperature protection; short circuit proof	
CONTROL and MONITORING		
Rectifier Alarm and Signaling	High & low mains shutdown, high temperature shutdown, rectifier failure, overvoltage shutdown, fan failure, communication failure	
Visual Indications	Alarms - RED, Warning - YELLOW, Normal operation - GREEN	
OTHER SPECIFICATIONS		
Isolation	Input to Output: 3.0kVac, Input to Earth: 1.5kVac, Output to Earth: 0.5kVdc	
Cooling	Fan-cooled, front to back airflow	
Fan Speed	Regulated by temperature and output power	
MTBF	> 250,000 hrs @ 25°C	
ENVIRONMENTAL		
Operating Temperature Range	-40°C to +65°C (de-rates above 45°C)	
Storage Temperature Range	-40°C to +70°C	
Relative Humidity	Operating: 5% to 95% RH non-condensing	
	Storage: 0% to 99% RH non-condensing	
Acoustic Noise	<55dB @ full load, 25°C	
PHYSICAL		
Dimensions WxDxH (mm)	85 x 191 x 41 (1U)	
Net Weight (kg)	0.95	
DESIGN STANDARDS		
Electrical Safety	EN/IEC62368-1	
EMC	EN55022/CISPR22 Class A, EN61000-6-1/-2/-3/-4	
AC Harmonics	EN61000-3-2	
AC Flicker and Fluctuations	EN61000-3-3	
Others	CE, RoHS compliant	

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

Rev05

Authorised, valued-added distributor

Australia & New Zealand



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