



ETR⁺ 948

Efficient : Trusted : Reliable

PRODUCT DESCRIPTION

The fully Digital Controlled ETR⁺948 rectifier module is designed and optimized for demanding power needs across different applications and industries.

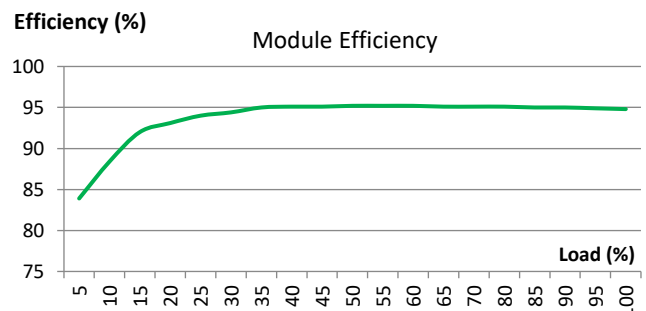
The modularity design, coupled with its cost effectiveness package, power density and reliability, ensures the overall availability of the system solution.

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 ⁺ 948
Capacity		900W
AC INPUT		
Voltage Range		90Vac to 290Vac (Nominal @ 176Vac to 275Vac)
Frequency		45Hz to 66Hz
Maximum Input Current		Max 5.2Arms @ 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)		900W @ nominal input
Output Current (Maximum)		18.75A @ 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; output voltage >43.5Vdc @ 900W
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		
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		<58dB @ full load, 25°C
PHYSICAL		
Dimensions WxDxH (mm)		82 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

Rev03

Authorised, valued-added distributor

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