

Rectifier ETR⁺ 3048



PRODUCT DESCRIPTION

The fully Digital Controlled **ETR⁺ 3048** rectifier module is designed and optimized for demanding power needs across different applications and industries.

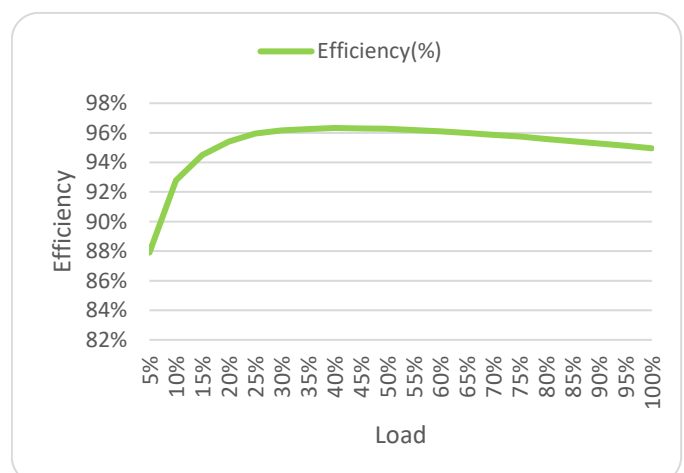
The modularity design, coupled with its cost effectiveness package, power density and reliability, ensures the overall availability of the system solution.

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 @ >96%**
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)



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TECHNICAL SPECIFICATIONS

AC INPUT	
Voltage	85 - 305VAC (Nominal 185 – 275 VAC)
Frequency	45Hz to 66Hz
Maximum Input Current	19.2 Arms maximum at 185Vac and full load
Power Factor	> 0.99 at Rated input 230Vac and 50% load or more
Input Protection	Varistors for transient protection Mains fuse in both lines Shutdown above 305Vac with Hysteresis
DC OUTPUT	
Voltage	53.5 VDC (adj. range: 43 - 58 VDC)
Output Power	3000W within nominal input
Output Current	62.5 Amps at 48 VDC and nominal input
Peak Efficiency	Up to 96.3%
Current Sharing	±5% of maximum current from 20 to 100% load
Static Voltage Regulation	±0.6% from 10% to 100% load
Dynamic Voltage Regulation	±5.0% for 10-90% or 90-10% load variation, regulation time < 50ms
Hold Up Time	> 15ms; output voltage > 43.5 VDC at 1500W load
Ripple and Noise	< 150 mV peak to peak 20 MHz bandwidth < 2 mV rms psophometric
Output Protection	Oversoltage shutdown Hot plug-in - Inrush current limiting Short circuit proof High temperature protection
OTHERS	
Alarms	High/Low mains shutdown High temperature shutdown Rectifier Failure Oversoltage shutdown on output Fan failure Communication failure
Visual Indications	Green LED: Normal Yellow LED: Warning Red LED: Failure
Isolation	3.0kVac - Input to Output 1.5kVac - Input to Earth 0.5kVdc - Output to Earth
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	-20 to +75°C de-rates above 55°C
Storage Temperature Range	-40 to +85°C
Relative Humidity	Operating: 5% to 95% RH non-condensing Storage: 0% to 99% RH non-condensing
Acoustic Noise	< 58dBA at Rated input and full load (Tambient > 40°C)
PHYSICAL	
Dimensions (W x H x D)	109 x 41 x 320mm
Net Weight (kg)	1.85kg
DESIGN STANDARDS	
Electrical Safety	EN/IEC60950-1
EMC	EN55022/CISPR22 Class B; EN 61000-6-1 / -2 / -3 / -4
AC Harmonics	EN 61000-3-2
AC Flicker and Fluctuation:	EN 61000-3-3
Others	CE RoHS compliant

Product specifications are subjected to change without prior notice

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