



ETR+ 1524

Efficient : Trusted : Reliable

PRODUCT DESCRIPTION

The fully Digital Controlled ETR+ 1524 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 @ >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

- Alarm System
- Control and Monitoring
- Relay Logic (PLC)



TECHNICAL SPECIFICATIONS

MODEL		ETR⁺ 1524
Capacity	1500W	
AC INPUT		
Voltage Range	85Vac to 305Vac (Nominal @ 185Vac to 275Vac)	
Frequency	45Hz to 66Hz	
Maximum Input Current	Max 10.2Arms @ 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	27Vdc (adjustable 21Vdc to 29Vdc)	
Output Power (Maximum)	1500W @ nominal input	
Output Current (Maximum)	62.5A @ 24Vdc with nominal input	
Peak Efficiency	up to 95%	
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 >22Vdc @ 750W	
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	> 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 90% 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/IEC62368-1	
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	

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

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Authorised, valued-added distributor

Australia & New Zealand



Powerbox Australia Pty Ltd

Sydney Head Office
4 Beaumont Road,
Mt Kuring-Gai, NSW 2080
Australia

 1800 251 380

 sales@powerbox.com.au

 powerbox.com.au

Powerbox Pacific Ltd

New Zealand Sales Office
1a Henry Rose Place,
Albany, Auckland
New Zealand 0632

 09 4158 320

 sales@powerbox.co.nz

 powerbox.co.nz