

NPR48-ES Energy Saver Rectifier



The **Eaton® NPR48-ES Energy Saver Rectifier** is designed for communications network operators who are striving to cut energy costs across the network, and/or to meet aggressive carbon footprint reduction targets.

Operating with well over 96% efficiency, it produces at least 50% less waste energy than most other modern rectifiers, and with potentially greater savings over older infrastructure.

The NPR48-ES Energy Saver Rectifier harnesses the technology of the APR48-ES 2kW rectifier to offer a powerful 3kW of output power.

This rectifier features intelligent digital signal processing for enhanced control, producing peak efficiency in excess of 96% for typical operating loads, while also maintaining a very high minimum operating efficiency of 95 to 96%, over a very wide range of loads.

The high power density, short depth and flexible mounting options makes the Energy Saver Rectifier well suited to limited space applications such as ETSI and road side cabinets.

The Energy Saver Rectifier is fully compatible with the existing Eaton SC200 system controller and it is one of the easiest rectifiers to use, with a simple plug-and-go insertion. It operates under a wide range of AC power conditions and in temperatures at up to 70°C (158°F).



An Eaton Green Product

Features

- 3000W output power
- Energy saving efficiency greater than 96%
- Wide efficiency curve
- Industry leading power density
- Fast on-line expansion of rectifiers (hot-swap)
- Simple 'plug and go' insert
- Unity power factor
- Digital signal processing for enhanced control
- Wide AC supply conditions
- Wide output voltage range
- Constant power output
- Compliance with international standards

Technical Specifications

Input

AC Supply	120V/208-240V, 50/60Hz (nominal) 185-275V full output power up to 50°C [122°F] 90-185V reduced output power
Power Factor	>0.99 (50 – 100% output current)
Efficiency	>96% peak >95% (20 – 100% output power)

Output

DC Output	
Voltage Range	43.2 – 57.5V
DC Output (maximum)	3000W, 60Amp at 50V

Environmental

Operating	
Temperature	-40°C – +70°C [-40°F – +158°F]
Range	Output power derates above 50°C [122°F]
Cooling	Temperature controlled, variable speed, high reliability fan <50dBA ambient temperature 25°C

Mechanical

Dimensions	3U: 130mm [5.1"], 63mm [2.5"], H,W,D
	266mm [10.5"] overall
Weight	2.3kg [5.1 lb]

Certifications

Europe	CE
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In the interests of continual product improvement all specifications are subject to change without notice. Performance ratings are valid with all other variables at Nominal.

