3G Access Power Solutions - APS12 Series

48V secure power up to 17.2kW

The **Eaton® 3G Access Power Solutions** are ideal for low to medium power telecommunications applications, offering compact, efficient, flexible and reliably secure DC power supply.

This 19" rack mount system has an integrated distribution panel and is available with up to 12 of the 48V Eaton 3G Access Power Rectifier modules or, for superior operating efficiency, with Energy Saver (ES) Rectifier modules with output up to 360A.

The advanced SC200 system controller offers high-level communications capability for real time information. It also has built-in intelligence for optimizing system efficiency, and comprehensive alarm and system status notifications, which are all designed to minimize operational expenses.

A comprehensive range of other controller features ensures maximum battery life and optimum system performance under a wide range of environmental conditions.

The 3G Access Power Solutions are pre-configured and all system settings are fully adjustable in software and stored in transferable, configuration files for repeatable and quick one-step system set-up.

Typical applications include providing secure power for cellular base stations, roadside terminals, data networks and IP routers.

Features

- Compact 9U, 19" sub-rack
- Up to 12 rectifier modules
- Compatible with Eaton Energy Saver (ES) Rectifiers
- Pre-configured software
- High power density (400A/9U)
- Dual AC input
- Fast on-line expansion of rectifiers (hot-swap)
- High efficiency and unity power factor
- Priority and non priority options for DC distributions

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Technical Specifications

Input

AC Supply†	100 – 240V, 50 – 60Hz (nominal)
	175 – 275V full power output up to 50°C [122°F]
	90 – 175V reduced power output
	Dual AC input - 1Ø, 2Ø or 3Ø (one supply feed per 6-rectifier shelf)
Power Factor†	>0.99 (50 – 100% Output Current)
Efficiency†	APR48-3G : 92% (50 – 100% Output Current)
	APR48-ES : >96% peak
	>95% (20% to 100% load, 230Vac)

Output

DC Output Voltage Range	43 – 57.5V
DC Output Power (maximum) *	APR48-3G : 17.2kW @ 48V
	APR48-ES : 17.2kW @ 48V
	* Ratings are stated without LVD's fitted. In some cases lower ratings may result when LVDs are used. Refer to installation guide for detailed load specs and MCB de-rating factors.

Environmental

Operating Temperature Range	-40°C to +70°C [-40°F to +158°F]
	Output current is derated above 40°C [104°F] and below -10°C [14°F]

Mechanical

Dimensions H,W,D	9U, 19" mounting, 335mm [12.4"]*
	Additional clear space is required for exhaust air.

System

System Controller	SC200 or SC100
DC Distribution Module	20-way circuit breakers (4 x Battery, 16 x Load)
Communication Features	USB direct*
	10BaseT Ethernet*, TCP/IP*, SNMP*, Modbus-TCP*, Modbus-RTU* and on board web server*
	RS232 to external PSTN or GSM modem (modem not included)
	*SC200 only
Low Voltage Disconnect (LVD)	Optional battery LVD, or non priority LVD, or battery and non priority LVD's. (Contactors 400A rated)
Rectifier Blank Panels	For unused rectifier positions
Options	External Surge Protection

† *Power factor, efficiency, AC voltage range and output power is dependant on rectifier module fitted. Refer to the rectifier data sheet for more information.*

Software

DCTools	Configuration software.
	Free download from:
	www.powerware.com/downloads
PowerManagerII	Remote control and monitoring software

Certifications

All products comply with international standards. Contact your local Eaton DC representative for details on the specific product versions available with these safety and EMC approvals:

Europe	CE
Australia / New Zealand	C-tick

In the interests of continual product improvement all specifications are subject to change without notice.