

Flexi - 3G Access Power Solution



The **Eaton® Flexi – 3G Access Power Solution** is designed for low to medium power applications requiring compact, efficient and flexible DC power supplies.

It is well suited to limited space installations with its reduced depth and battery cabinet height options. The innovative systems design reduces shipping costs, improves storage and handling, and is easily assembled onsite.

This solution uses the APR48-3G rectifier module or, for superior operating efficiency, can be fitted with Energy Saver (ES) rectifier modules. The system accommodates up to five 48V strings of high capacity VRLA batteries. Low Voltage Disconnect (LVD), for battery protection, is included. All systems offer integral AC and DC distribution with flexible combinations of MCBs.

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 Flexi – 3G series of power systems are configured for fast installation and set-up. All systems settings are fully adjustable in software and stored in transferable, configuration files for repeatable one-step system set-up.

Typical Applications

- Wireless BTS and MSC sites (CDMA/GSM/3G UMTS)
- WiMAX Nodes
- Local and central office switching
- IP switching nodes

Features

- Innovative system design reduces shipping costs and is easily assembled on-site
- Integrated batteries with optional rack heights
- Reduced rack-depth option (450mm) ideal for installations with restricted space
- Integral DC distribution
- Wide AC input voltage range
- Hot swappable rectifiers
- High power density
- Pre-configured software
- Flexible modular design
- Remote monitoring and control
- Ethernet communications offering SNMP
- Compatible with Eaton Energy Saver (ES) Rectifiers



Powering Business Worldwide

Technical Specifications

Input

AC Supply†	230/400 3Ø+N+PE (cabinets may be supplied from 230V single-phase) 120/208 3Ø+PE (specific version with protection in each phase) 230/400 dual, single or 3-phase connection (specific version)
Frequency	50/60Hz (nominal)
Power Factor†	>0.99 (50 – 100% Output Current)
Efficiency †	>96% peak >95% (20% to 100% load, 230Vac)

Output

DC Output Voltage Range	43 – 57.5V
Maximum DC Output Power† *	APR48-3G : 16.2kW APR48-ES : 18.0kW * Ratings are stated with LVD's fitted.

Environmental

Operating Temperature Range	-40°C to +70°C Maximum output power is derated according to rectifier used:- APR48-3G: below -10°C and above 50°C APR48-ES: below -10°C and above 55°C
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Mechanical

Dimensions H,W,D	Combined battery rack / Power Box: 1800/2000mm, 600mm, 450mm 2121mm, 600mm, 600mm Battery Rack: 1150mm – Maximum 4 Battery Shelves (258mm min. space) 1350mm – Maximum 4 Battery Shelves (308mm min. space) 1471mm – Maximum 5 Battery Shelves (262mm min. space)
Weight	System cabinet: <110kg (excluding rectifiers and batteries) Rectifiers : APR48-3G/APR48-ES: 1.7kg
Finish	Cabinet is constructed with a galvanised finish (unpainted)

System

System Controller	Extended functionality: SC200
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)

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

Options

Battery Rack Extension	Extension kit for extending battery rack from 450mm to 600mm depth, is available for 1150 and 1350mm battery racks
DC Distribution	22 Load MCB (18mm) positions * 4 Battery MCB (27mm) positions *
	*other configurations available
Cabinet Doors	Optional doors available for battery racks and Power Box
Rectifier Blank Panels	For unused rectifier positions

Software

PowerManagerII	Remote control and monitoring for small to large networks
DCTools	Configuration Software. Free download from www.powerware.com/downloads

Certifications

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

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

