DV2 - 3G Metro Power Solutions

48V integrated systems up to 80kW

The **Eaton® Data-Voice-Video Metro Power Solutions** range of DC power systems is designed for telecommunications network applications requiring compact, efficient and flexible DC power.

These DC power systems use Eaton APR-3G or, for superior operating efficiency, can be fitted with Energy Saver (ES) rectifier modules. AC and DC distribution is integral with flexible combinations of fuses and MCBs, and an SC200 system controller. Low Voltage Disconnect (LVD) options are also available.

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.

Eaton DV2 Metro Power Solutions are pre-configured for fast installation and set-up. All system settings are fully adjustable in software and stored in transferable configuration files for repeatable one-step system set-up.

Typical applications are providing 48V standby power for end-of-row and centralized architecture such as local and central office switches and other large switch installations, wireless switching centers and long-distance transmission systems.

Typical Applications:

- Wireless MSC sites (CDMA/GSM/3G UMTS)
- Transmission terminals
- Local and central office switching
- Point of presence (POP) sites

Features

- Intelligent system management features
- Pre-configured software
- High power density
- Fast on-line expansion of rectifiers (hot-swap)
- High efficiency and unity power factor
- Range of DC distribution configurations
- Battery condition monitoring
- Wide AC input voltage range
- Seismic rated cabinet
- Remote monitoring and control
- Full length security door (optional)
- Compatible with Eaton Energy Saver (ES) Rectifiers

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Technical Specification

Input

AC Supply†	3P+N+PE, 3P+PE, 2P+PE, 1P+N+PE 50/60Hz (nominal)
	Other options available depending on system capacity.
Power Factor†	>0.99 (20 – 100% Maximum System Current)
Efficiency†	>96% peak >95% (20% to 100% load, 230Vac)

Output

DC Output Voltage Range	40 – 57.5V
Typical DC Output Power†*	APR48-3G : 72kW (1500A @ 48V) APR48-ES : 80kW (1667A @ 48V) * Ratings are stated without LVD's fitted. In some cases lower ratings may result when LVDs are used.

Environmental

Operating Temperature Range*	-25°C to +50°C * Output current is derated above 50°C [122°F]. Refer to rectifier data sheet for more information.

Mechanical

Dimensions H,W,D	2000mm [78.7"], 600mm [23.6"], 600mm [23.6"]
Weight	200kg [443lb] Typical configuration with 40 APR-3G rectifier modules.

System

Rectifiers	APR48-3G APR48-ES
System Controller	SC100/SC200
Communications 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

† *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

AC Distribution	Coordinated transient protection up to 40kA, 8/20µs Incoming isolator Individual rectifier MCBs
DC Distribution	A wide range of DC distribution elements are available including: 24 x 18mm MCBs (1-63A) 16 x 27mm MCBs (10-125A) 10 x DIN00 type HRC fuses (20-160A) 6 x DIN1 type HRC fuses (63-250A) 6 x DIN2 type HRC fuses (100-400A) 4 x DIN3 type HRC fuses (400-630A) 4 x DIN4 type HRC fuses (800-1200A)
Low Voltage Disconnect (LVD)	Single or dual LVD can be configured as battery or load disconnect including non-priority load disconnect.
Rectifier Blank Panels	For unused rectifier positions
SiteSure	Input/output modules to monitor and control external equipment
CellSure	Comprehensive battery monitoring and fault diagnosis system with patented state-of-health algorithms.

Software

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

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, Seismic rating to NZS4203

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

RoHS COMPLIANT

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