

DV2 - 3G Core Power Solutions



48V integrated systems up to 750kW

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

These DC power systems use Eaton CR48-3G rectifier modules and include an integral AC and DC distribution with flexible combinations of fuses and MCBs, and an SC200 system controller. Low voltage disconnect (LVD) options are also available. DC distribution cabinets can be connected in parallel where additional distribution space is required. Systems up to 4000A can be configured using internal horizontal busbars, and up to 15,000A using external busbars.

Intelligent system management features include battery temperature compensation, fast charge, battery current

limit, automatic equalize charging and automatic battery condition monitoring.

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

Eaton DV2 Core 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

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

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)



Powering Business Worldwide

Technical Specifications

Input

Nominal AC Supply	3P+PE, Δ 208VAC 3P+N+PE, Y 230/400VAC 50/60Hz
Power Factor	>0.99* (20 – 100% Maximum System Current)
Efficiency	up to 92% *

Output

DC Output Voltage Range	40 – 58V
Typical DC Output Power	46kW - 750kW †

Environmental

Operating Temperature Range	-25°C to +50°C*
-----------------------------	-----------------

Mechanical

Dimensions H,W,D	2000mm [78.7"], 600mm [23.6"], 600mm [23.6"]
Weight	200kg [443lb] Typical configuration with 16 CR48-3G rectifier modules.

System

System Controller	SC200
-------------------	-------

* Refer to rectifier specifications for more information.

† System output power will vary depending on rectifiers and batteries selected.

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:

China	MII
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.

