

# 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)

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# Technical Specifications



| Input             |   |
|-------------------|---|
| Nominal AC Supply | 3P+PE, Δ 208VAC<br>3P+N+PE, Y 230/400VAC<br>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]<br>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<br>Individual rectifier MCBs   |
| DC Distribution              | A wide range of DC distribution elements are available including:<br>24 x 18mm MCBs (1-63A)<br>16 x 27mm MCBs (10-125A)<br>10 x DIN00 type HRC fuses (20-160A)<br>6 x DIN1 type HRC fuses (63-250A)<br>6 x DIN2 type HRC fuses (100-400A)<br>4 x DIN3 type HRC fuses (400-630A)<br>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 <a href="http://www.powerware.com/downloads">www.powerware.com/downloads</a> |

| 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.



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