

# 3G Modular Converter Solutions CM3 Series



CM3-420 converter chassis



Integrated with APS3 DC System

## Features

- 19" sub-rack
- Modular 1U
- Front or mid mount options
- Up to 2 converter modules
- N+1 redundancy option
- Designed to be integrated with Eaton APS-3G
- Input from 24V, 48V
- Output for 12V, 24V and 48V
- Color Coded Modules
- Floating output for Positive or Negative Earth
- Fast on-line replacement of modules (hot-swap)
- Remote monitoring & control via Ethernet when integrated with Eaton SC200 based systems.
- Includes IOB interface module

12V, 24V, 48V secure DC-DC power converter systems.

The Eaton® 3G Module Converter Solutions are ideal for low to medium power telecommunications and industrial applications, offering compact, efficient, flexible and reliable secure DC power supply.

The CM3 rack mount converter chassis is intended as an adjunct to an Eaton APS-3G DC Power System to provide alternative voltages or earth polarities to the main DC Power System.

It is offered only as an integrated solution and not as a standalone product.

The 19" rack mount chassis can be fitted with up to 2 of the Eaton 3G Modular Converter Unit modules as 12V, 24V or 48V.

Multiple CM3 chassis may be used when more than one output voltage is required.

Typical applications include providing secure power for communications equipment, data networks, and industrial signalling and control.

When combined with the APS-3G DC Power System, the CM3 is integrated into the SC200 of the host power system.

The SC200 series of system controller offers highly advanced control and monitoring features including Smart Alarm – a configurable logic for automated site energy control.

The SC200 also offers a complete array of communications options with Ethernet, GSM cellular (including text messaging) standard modem and TCP/IP communications options.



Powering Business Worldwide

# Technical Specifications

## Input

|                      |   |
|----------------------|---|
| Nominal Voltage (DC) | 24V, 48V, (Depends on MCU modules fitted) |
| Voltage Range (DC)   | 24V, (20-30V)<br>48V, (40-60V)            |
| Efficiency           | 85-90%                                    |

## Output

|                      |  |
|----------------------|--|
| Nominal Voltage (DC) | 12V, 24V, 48V (Depends on MCU modules fitted)    |
| Voltage Range (DC)   | 12V, (12-15V)<br>24V, (23-32V)<br>48V, (44-56V)  |
| Power (DC)           | CM3-420-0121<br>12V:881W<br>24V:933W<br>48V:935W |
| Load Regulation      | < +/-0.5% (20-100% load)                         |

## Environmental

|                       |                                 |
|-----------------------|---------------------------------|
| Operating Temperature | -25 °C to +55 °C at rated power |
| Isolation             | 5kV DC input to output          |

## Mechanical

|                     |  |
|---------------------|--|
| Dimensions<br>H,W,D | CM3-420:<br>1U, 19" mounting, 329mm*<br>44.45mm, 445mm, 329mm* |
|---------------------|--|

*\*Additional clear space is required for exhaust air.*

## System

|                            |  |
|----------------------------|--|
| System Controller          | None. Interfaces to SC200 in main DC power system via IOB/RXP.   |
| Input Connections          | CM3-420<br>2 x Cordsets, 16AWG, 13A 250V 90°C  |
| DC Output Distribution     | None.<br>M6 studs provided for bulk DC output  |
| Communications Features*   | RXP to SC200<br><br>USB direct<br>10Base T Ethernet, TCP/IP, SNMP, Modbus-TCP, Modbus-RTU and on board web server.<br>RS232 to external PSTN or GSM modem (modem not included)<br><i>*SC200 only in host DC power system</i> |
| Low Volts Disconnect (LVD) | None.  |
| Blank Panels               | For unused converter positions   |
| Application advice:        | See Eaton Application Note AN0139. This product is designed only for integration with Eaton APS-3G power systems.  |

## Software

|          |   |
|----------|---|
| DC Tools | Configuration software.<br>Free download from:<br><a href="http://dcpower.eaton.com">http://dcpower.eaton.com</a> |
|----------|---|

In the interests of continual product improvement all specifications are subject to change without notice. Performance ratings are valid with all other variables at Nominal. Specifications guaranteed over rated operating range. Images are indicative views only and not guaranteed representations and will vary according to options fitted.

