

## CM624-48 650W 48 to 24V DC Modular DC-DC Converter

Efficient and reliable, these modular rack mount converters allow for easy paralleling of modules to provide redundancy or higher power outputs. Designed for use in modern telecommunications networks these converters offer unrivalled power densities.

The unique design allows for mounting four converters in a 1U x 19" rack space.

"Plug and play" installation allows quick and easy installation and system expansion. These robust, reliable converters are forced cooled by a speed controlled and monitored high reliability fan.

When installed into an Enatel DC system solution the CM624-48 will communicate with a SM3x series controller for system level monitoring and control.

- Forced cooled.
- Thermally protected.
- Input/output voltage and current protected.
- Serial alarm and control interface.
- Microprocessor controlled.











## **Specifications**

DC Input

Nominal Input Voltage: 48V Input Voltage Range: 40-60V

Input Protection:

Fuses: Fuse in the positive input with crowbar diode

Input Voltage: Converter shuts down when input voltage is out of range,

Automatically restarts when correct voltage is restored

DC Output

 Nominal Output Voltage:
 24V

 Output Voltage Range:
 22·26V

 Maximum Output Current:
 25A

 Maximum Output Power:
 650W

 Efficiency:
 91%

Regulation:

Line:  $\pm 0.1\%$ 

Load:  $\pm 0.5\%$  (no load to full load)

Start-up Time: Walk-in delay 2-8 seconds depending on load and output voltage.

Protection:

Current Limit: Adjustable to 50-100% of maximum rated current
Over Temperature: Auto current turndown, backup shutdown protection
Polarity Reversal: Output fuse in positive with crowbar diode

Over Voltage: Adjustable limit

Noise: (under nominal conditions)

Ripple <100Hz: <1mV rms unweighted

Voice Band 100Hz-5KHz: <1mV rms psophometric

Wide Band 5kHz-1MHz: <5mV rms unweighted

Peak to Peak 0-20MHz: <50mV peak to peak

Isolation:

Input to Output: 4230V DC

Input to Chassis: 2115V DC (VDR to chassis removed)

Output to Chassis: 2115V DC

**Environmental Requirements** 

Ambient Temperature:

Nominal: +25 +/- 5°C

Range:  $-10 \text{ to } +70^{\circ}\text{C}$  (maximum output power is derated above  $+50^{\circ}\text{C}$ )

Storage Temperature:  $-20 \text{ to } +70^{\circ}\text{C}$ 

Humidity: 5-95% RH (non condensing)

Altitude: <2500m, De-rate maximum ambient temperature by +4°C per 1000m above sea level

Mechanical

Dimensions W, H, D: 111.5mm, 44mm (1U), 282 overall (rack depth 260mm)

Weight: 1.1kg

Shipping Dimensions W, H, D: 170mm, 52mm, 325mm

Shipping Weight: 1.6kg
Cooling: Forced cooled.

Compliances

Safety: EN60950
Electostatic Discharge: CISPR24
Radiated Radio Frequency: CISPR22

Other: CE & RoHS compliant

Additional Accesories

ACM-4T: 1U 4 position DC-DC converter shelf, no cables

Ordering Information

CMXXX-YY:

C = Converter M = Modular version

XXX = Converter rating and output voltage

624=650W 24V nom

-YY = Converter input voltage

-48 = 48V nom