

## 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.



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## Specifications



<b>DC Input</b>	
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
<b>DC Output</b>	
Nominal Output Voltage:	24V
Output Voltage Range:	22-26V
Maximum Output Current:	29.5A
Maximum Output Power:	650W
Efficiency:	91%
Regulation:	
Line:	± 0.1%
Load:	± 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 0-20HMz:	<50mV peak to peak
Isolation:	
Input to Output:	3000V AC
Input to Chassis:	1500V AC (VDR to chassis removed)
Output to Chassis:	1500V AC
<b>Environmental Requirements</b>	
<b>Ambient Temperature:</b>	
Nominal:	+25 +/- 5°C
Range:	-10 to +70°C (maximum output power is derated above +50°C)
Storage Temperature:	-20 to +70°C
Humidity:	5-95% RH (non condensing)
Altitude:	<2500m, De-rate maximum ambient temperature by +4°C per 1000m above sea level
<b>Mechanical</b>	
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.
<b>Compliances</b>	
Safety:	EN60950
Electrostatic Discharge:	CISPR24
Radiated Radio Frequency:	CISPR22
Other:	CE & RoHS compliant
<b>Additional Accessories</b>	
ACM-4T:	1U 4 position DC-DC converter shelf, no cables
<b>Ordering Information</b>	
CMXXX-YY:	
C =	Converter
M =	Modular version
XXX =	Converter rating and output voltage 624=650W 24V nom
-YY =	Converter input voltage -48 = 48V nom