

CM612-48 560W 48 to 12V 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 CM612-48 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:	12V	
Output Voltage Range:	11-14V	
Maximum Output Current:	40A	
Maximum Output Power:	560W	
Efficiency:	89%	
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 0-20MHz:	<50mV peak to peak	
Isolation:		
Input to Output:	3000V AC	
Input to Chassis:	1500V AC (VDR to chassis removed)	
Output to Chassis:	1500V AC	
Environmental Requirements		
Ambient Temperature:		
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	
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	
Electrostatic Discharge:	CISPR24	
Radiated Radio Frequency:	CISPR22	
Other:	CE & RoHS compliant	
Additional Accessories		
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 612=560W 12V nom	
-YY =	Converter input voltage -48 = 48V nom	

