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CSM46

±190VDC to -48VDC Converter



- ±190V to 48V DC-DC Down Converter for remote/line powering applications (RFT-V)
- Utilize existing copper pair networks for distributing power
- Reduce truck rolls and operating expenses with no batteries at remote site
- High reliability convection-cooled design and compact 1RU footprint

The CSM46 is a ±190V to 48V DC-DC converter system designed for remote sites in network or line powering architectures. The compact modular design makes the CSM46 ideal for remote applications such as xDSL and FTTx.

Network powering is a perfect solution for applications where AC utility may not be available, battery maintenance would be cost prohibitive, or remote enclosures may not have enough internal space or cooling capacity to accept a traditional rectifier and battery system. The CSM46 converter works seamlessly with the Alpha® CSM36 upconverter to allow for complete end-to-end network powering.

The CSM46 converter is available in high power density 10-module and 4-module shelves. Standard system features include Form C alarm relays, front access connection points, connectorized cable harness options and front access test points for quick monitoring of incoming line voltage.

The CSM46 converter is the ultimate network powering solution that blends both high power density capability with extensive features. With over 15 years experience in designing network powering solutions, Alpha® high voltage converter solutions also combine industry leading safety and reliability.

CSM46 ±190VDC to -48VDC Converter

Part Number: 012-554-20-041

Electrical	
Input Voltage:	195 to 380VDC (±97.5 to ±190VDC)
Input Current:	240mA ±2%
Efficiency:	>85%
Output Power:	Up to 75W per channel or 150W per module (de-rates linearly with input voltage)
Output Voltage:	-50 to -55VDC
Output Current:	1.5A max (de-rates linearly with input voltage)
Noise:	<500mv p-p to 20MHz <250mVrms to 20MHz
Performance / Features	
Indicators:	Converter A: I/P OK (green LED) Converter A: O/P OK (green LED) Converter B: I/P OK (green LED) Converter B: O/P OK (green LED)
Test points:	Converter A: I/P voltage Converter B: I/P voltage
Protection:	<ul style="list-style-type: none"> • Input fuses • Input current limit • Input transient protection • Input high and low voltage shutdown • Thermal shutdown • Output parallel diodes • Output OVP • Reverse polarity protection
Miscellaneous:	Alarm masking switch for disabling shelf level alarming
Mechanical	
Dimensions:	mm: 42H x 23W x 280D in: 1.65H x .9W x 11D
Weight:	0.67kg (1.5lbs)
Environmental	
Temperature:	-40 to 75°C (-40 to 167°F) with external airflow
Humidity:	0 to 95% NC

Shelves	
10-Module shelf P/N: 030-831-20-040	
4-Module shelf P/N: 030-903-20-040	
Mechanical	
Dimensions: (excludes connectors & mounting brackets)	mm: 45H x 273W x 311D in: 1.75H x 10.75W x 12.25D
Weight:	4.87kg (10.8lbs)
Performance/Features	
Access:	Front access
Connections:	Input: 50-pin amp-champ style connector and wireharness Output: Anderson SBS50 and molex style options and wireharness
Alarm:	Flying leads or molex style connector and wireharness
Chassis gnd:	¼" studs on ½" C
Alarms:	<ul style="list-style-type: none"> • Major form C relay • Minor form C relay
Note: Relays are field replaceable	
Agency Compliance	
Safety:	<ul style="list-style-type: none"> • CSA/UL 60950-1 • CSA/UL 60950-21 (RFT-V circuit) • CE IEC/EN 60950
EMI:	<ul style="list-style-type: none"> • Class A radiated • GR-1089 issue 3 (applicable sections)



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