

TE20-2120

Outdoor Down Converter System



Your Power Solutions Partner

- Provides 48Vdc output from ± 190 Vdc RFT-V input
- Maximum output power available is 3000W at 48Vdc
- Front-access 1RU distribution panel offers up to 20 GMT fuse positions
- 50-pair protector panel provided for input surge protection to each RFT-V circuit
- NEMA 3R outdoor cabinet supports various mounting options

The TE20-2120 is an outdoor enclosure designed for remote small power (AC or DC) applications utilizing the CSM46 DC-DC down converter power system. The input requirements to the cabinet are ± 190 Vdc line powering (RFT-V circuit) over OSP twisted copper pair that terminate onto 25-pair 3M 4005-GBM/TR connector. A 50-pair protector panel with 5-pin gas tube module (sold separately) are required to energize the remote load and provides high-voltage surge protection to each RFT-V circuit. There can be up to (2) CSM46 10-module shelves installed in the TE20-2120 rated to deliver up to 3000W of 48VDC power. A 1RU 20 position front-access GMT fuse panel is provided for distribution to the remote load. Applications include remote powering ODAS remotes, Remote Radio Heads and Small Cells.

Remote 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 works seamlessly with the Alpha LPS36 up-converter to allow for complete end-to-end remote powering.



TE20-2120 Remote Line Power Down-Converter System

ELECTRICAL

Input Voltage Range: 195 to 380Vdc (± 97.5 to ± 190 Vdc)
Input Current: 240mA $\pm 2\%$
Efficiency: > 85%
Output Voltage: -50 to -55Vdc
Output Power:

- Up to 75W per channel/circuit
- (1) CSM46 10-module shelf can deliver up to 1500W @ 48Vdc
- Up to (2) CSM46 10-module shelves can be installed in the TE20-2120

Distribution: 20 position GMT fuse panel
Protection: 50-pair protector panel
Electrical Noise:

- <500mV p-p to 20MHz
- <250mV rms to 20MHz

MECHANICAL

Dimensions:
 mm: 516H x 544W x 518D
 inches: 20.3H x 21.4W x 20.4D
Weight: 29kg (65lbs)
Mounting: Pole/Wall/Ground
Connections:
 Input: 25-pair 3M 4005-GBM/TR connector
 Output: 20-position GMT Fuse Panel

ENVIRONMENTAL

Temperature:
 Operation: -40 to 46°C (-40 to 115°F) plus solar loading
 Storage: -40 to 85°C (-40 to 185°F)
Enclosure Rating: NEMA 3R
Surge Protection: UL 497 Listed protectors for the inputs
Humidity: 5 to 95% RH
Elevation: -500 to 2800m (-1640 to 9186ft)

PERFORMANCE/FEATURES

Alarm: Form C relay (minor/major)

AGENCY COMPLIANCE

Safety: IEC/CSA/UL 60950-1, IEC/CSA/UL 60950-21
EMC: CFR47 (FCC) Part 15 Class A, EN 55022 class A

RELATED COMPONENTS

CSM46 DC/DC Converter ± 190 to 48V, RoHS: P/N 012-554-20
 Prot Mod, GDT, 5-Pin, 280-420V, Red: P/N 1620018



Contact Alpha to discuss other enclosure solutions.


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