

SOLAR CONVERTER

S48-3000



KEY FEATURES

- 3000 watt converter designed for -48V DC power applications
- High conversion efficiency, >98%
- High MPP tracking efficiency, >99.5%
- Proven DSP technology ensures ultra reliable system performance
- Modular hot pluggable unit
- Wide operating temperature window
- Input & output protected against reverse polarity connection

The Solar Converter from Vertiv brings reliability and high conversion efficiency to solar panel energy sources in telecommunications networks.

Description

The 3000 watt Solar Converter (S48-3000) from Vertiv is designed to convert energy from solar panels into regulated -48VDC for telecom applications. The converter operates in MPPT (Maximum Power Point Tracking) mode, enabling maximum power extraction from the solar panels throughout the day.

The S48-3000 converter is used as an integral part of Vertiv hybrid power systems for telecom applications.

Application

The Solar Converter provides energy from solar panels to telecom sites in the access and transmission network. Together with other energy sources (such as battery, diesel generator and wind turbine), the S48-3000 converter contributes to a reliable supply of energy. The high conversion efficiency and ability to accurately track the MPP (Maximum Power Point) will contribute to optimal utilization of the installed solar panel array.



Technical Specifications

DC INPUT

Input Voltage Range	60Vdc ~ 150Vdc@ Rated output (self-test voltage upon startup \geq 65Vdc)
Max Static Input Voltage	165 VDC
MPP Tracking Accuracy	99.5%

DC OUTPUT

Output Voltage Range	-48 to 58 VDC
Output Power	3 kW
Max Output Current	61 A
Temperature Derating	See diagram
Efficiency	> 98%
Psophometric Noise	< 2 mV

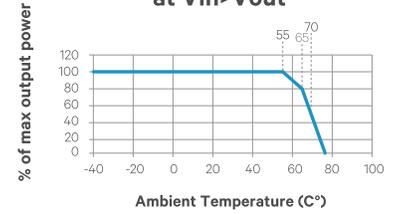
ENVIRONMENTAL

Temperature Range, Operational	-20°C to +75°C
Relative Humidity	\leq 95 %
Audible Noise	\leq 50 dB
Safety	EN62109-1:2010 and EN50178:1997

MECHANICS

Dimensions (H x W x D)	3U x 1U x 292 mm
Weight	< 3 kg

Output Power vs. Temperature at $V_{in} > V_{out}$



Output voltage vs. Output current, max. output power 3000 W

