

# SiteFlex<sup>®</sup> 3kW

SOLAR CONVERTER



## OVERVIEW

- **High efficiency solar converter for telecom applications**
- **Maximum Power Point Tracking (MPPT)**
- **Designed to convert standard photovoltaic voltage into stable nominal -48 VDC**
- **Operating temperature from -40°C to 75°C for deployment in the harshest outdoor environments**
- **Wide DC input operating range 120 to 425 VDC**

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SiteFlex<sup>®</sup> solar converter power solutions makes up a cost effective and high quality solution for a wide range of telecom applications.

With an innovative and compact, fan-cooled design, SiteFlex solar converters product range constitutes a cost effective solution with maintained quality and reliability.

SiteFlex 3kW solar converter provides a power with a constant voltage based on latest switch mode technology, using a Digital Signaling Processor (DSP) for high efficiency operation.

## ELECTRICAL

Input Voltage	Nominal: 340 VDC Operating: 120 to 420 VDC (start-up voltage >160 VDC) Extended: 120 to 200 VDC (linear de-rated power)
Input Current	≤17 A
MPPT Voltage range	120 to 340 VDC
MPPT Precision	≥99% @ load ≥400 W
Power	3,000 W continuous (1,800 W output @ 120 Vdc input)
Power Factor	≥99% @ load ≥400 W
Efficiency	>96%
Output Voltage	42 to 58 VDC (rated @ 54.5 VDC)
Output Current	55 A max a@ 54.5 VDC
Load Regulation	<±0.5%
Line Regulation	<±0.1%
Transient Response	<±5% for 25% to 50% and 50% to 75% load step
Wide Band Noise	≤50 mV (3. 4kHz to 150 kHz) ≤20 mV 150 kHz to 30 MHz)
Psophometric Noise	<2 mV RMS
Acoustic	<55 dBA @ 25°C to 40°C

## MECHANICAL

Dimensions (H x W x D)	41.5 x 106.4 x 291mm
Weight	≤2 kg (≤4.41 lbs)

## ENVIRONMENTAL

Temperature	Operation: -40°C to 75°C full rated output up to 50°C >2,400 W @ 65°C Storage: -40°C to 75°C
Humidity	5% to 95% RH non-condensing
Elevation	0 to 3,000 m AMSL no derating. 3000 m to 4000 m AMSL the max. Operating temperature is reduced by 1°C per every 200 m of the altitude increase
Protection class	IP20

## STANDARDS AND CERTIFICATION

Electrical safety	EN 62638-1 Ed.2 IEC/EN 62368-1 Ed.3
EMC	ETSI EN 300 386 Emission: EN 55032, CISPR 32 Immunity: IEC/EN 61000-4-2, IEC/EN 61000-4-3, IEC/EN 61000-4-4, IEC/EN 61000-4-5, IEC/EN 61000-4-6
RoHS / WEEE	Compliant
CE Mark (UE)	Yes
RCM (AU and NZ)	Yes

## MISCELLANEOUS

Sub-racks	For sub-rack configurations, please contact your local
MTBF	>500,000h @ 25°C, rated input, output with full load
Cooling	Fan cooled (2pcs), airflow front-to-back
LED Indicators	Operation – Green* Minor alarm – Yellow* Major alarm – Red* *Please consult manual for details
Insulation Resistance	Test voltage 500 VDC, insulation resistance ≥10MΩ