

SiteFlex® 3kW

MODULAR SWITCHED MODE RECTIFIER



OVERVIEW

- **Compact 56.1 A rectifier for 48 V telecom applications**
- **High efficiency (approaching 96.1%) for reduced OPEX and carbon footprint**
- **-40°C to 75°C operating temperature range for deployment in the harshest outdoor environments**
- **Up to 12 kW in 19" 1RU shelf**
- **High power density (2.37 W/cm³) frees up more space for revenue generating equipment**
- **Wide 85 to 300 VAC input operating range for worldwide requirements**

SiteFlex® products are a range of high quality power equipment that delivers cost-effective solutions for a wide spectrum of telecom applications.

The SiteFlex 3kW rectifier benefits from an innovative and compact fan-cooled design and achieves great levels of reliability.

The SiteFlex 3kW rectifier is ideal for use in conjunction with SiteFlex® 1RU system controller and is available in sub-rack solutions up to 30 kW / 561 A.

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

ELECTRICAL

Input Voltage	Nominal: 200 to 250 VAC Operating: 85 to 300 VAC Extended: 85 to 175 VAC (linear de-rated power)
Input Current	≤17 A
Input Frequency	45 to 66 Hz
Power	3,000 W (@ 176 VAC to 290 VAC) 3,000 W to 1250 W (@176 VAC to 85 VAC linear derating)
Power Factor	>0.99 (20 to 100% load)
THD	<5% (20 to 100% load)
Efficiency	>96.1%
Output Voltage	42 to 58 VDC (rated @ 53.5 VDC)
Output Current	56.1 A max @ 53.5 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 (3.4 kHz 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 291 mm
Weight	≤2kg

ENVIRONMENTAL

Temperature	Operation: -40°C to 75°C full rated output up to 55°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, EN/IEC 610000-3-2, EN/IEC 61000-3-3 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, IEC/EN 61000-4-11
RoHS / WEEE	Compliant
CE Mark (UE)	Yes
RCM (AU and NZ)	Yes

MISCELLANEOUS:

Sub-racks	For configurations, please contact your local EnerSys representative
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* <small>*Please consult manual for details</small>
Insulation Resistance	Test voltage 500 VDC, insulation resistance ≥2 MΩ