

Serenity 48V/2000W

High Efficiency Rectifier



Exicom's new telecom rectifier Serenity 48V/2000W combines advanced design for reliability and an industrial leading efficiency of 95.5%. The single phase, hot pluggable fan cooled rectifier provides outstanding power density while its intelligent & advanced protection features allow users to deploy it in any kind of environment -urban/ rural/ poor grid etc. Its compact size gives customers flexibility to meet higher power demands in tight spaces as per telecom requirements

Key Features:



High efficiency of 95.5% & high power density with 8kW in 1U shelf



Wide operating input voltage and temperature range



Small and Large: Can support installations from 2kW to 200kW



Hot Plug and user-friendly registration for easy maintenance



Global compliance



Multi-application use

Applications:

- Telecom: Cellular base station sites, LTE/ WiMax, and hub sites
- Smart Cities: Smart poles, surveillance etc.
- Power Utilities: Control & protection and communication equipment
- Railways: Signaling, communication equipment and control & protection

Serenity 48V/ 2000W

Technical Specifications

AC Input

Voltage	90 - 300Vac
Frequency	45- 66Hz
Maximum Current	12.0 A
THD	<5% (50% to 100% Load)
Power Factor	Typical 0.99
Input Protection	Off <85-310Vac < Off Self-protection upto 420Vac Line & neutral input fuses MOV transient protection
Galvanic Isolation	
Input to Output	3000Vac
Input to Ground	1500Vac
Output to Ground	650Vdc

DC Output

Voltage	54.0V; Adj: 42.0 - 58.0V
Output Power	2000W above 185Vac 900W at 90Vac
Maximum Current	42A@48V
Current Sharing	± 5% of max. current
Static Voltage regulation	± 0.5% for 10%-100% load
Dynamic Voltage regulation	± 5% for 90% - 10% load
Hold up time	>10ms
Ripple Noise	<200 mV p-p 30MHz bandwidth
Output Protection	Over voltage shutdown Short circuit proof Hot-plug inrush current limiting Output fuse Over temperature shut-off
Efficiency	Peak 95.5 %

Serenity 48V/ 2000W

Technical Specifications

Other Specifications

Operating Temperature	-40°C to +75°C, linear derating from 50° onwards
Storage Temperature	-40°C to +85°C
Cooling	5% to 95% non-condensing
Humidity	Forced Air
Acoustic Noise	Less than 55dB(A)
MTBF	>300,000 Hrs. (25°C ambient)
Communication Interface	CAN bus
Control & Monitoring	M1000 controller
Dimensions (wxhxd)	106 x 41.5 x 360 (mm)
Weight	2.2 kg
LED Indications	
Green	On: No faults Flash - Rectifier comm. ok Slow flash - Sleep mode
Yellow (Warnings)	On - Input low / high, rectifier in power de-rate mode, current limit Flash - Rectifier, comm. fail
Red (Alarms)	On - Abnormal temp or input shutdown, low O/p voltage alarm, over-voltage shutdown on output Flash - Rectifier fan fail

Applicable Standards

Electrical Safety	EN 60950-1
EMC / EMI	EN 55022 (Class B), EN 55024
Environmental	EN 300019-1-1/-2/-3. ROHS Complied

Part No. Description

HE - 513140	Serenity 48V/2000W Rectifier
-------------	------------------------------

Mobility Solutions



DC Telecom Solutions



ESS Solutions



INDIA

Plot No 38, Institutional Area,
Sector 32, Gurugram, Haryana
122001, India
cpsales.india@exicom.in

AFRICA

Business Center 1, M Floor, The
Meydan Hotel, Nad Al Sheba,
Dubai, U.A.E.
cpsales.africa@exicom.in

MIDDLE EAST

Business Center 1, M Floor, The
Meydan Hotel, Nad Al Sheba,
Dubai, U.A.E.
cpsales.mea@exicom.in

SOUTH EAST ASIA COUNTRY

No 23, Jalan Linggis 15/24, Taman
Perindustrian Linggis, Seksyen 15,
40200 Shah Alam Selangor, Malaysia
cpsales.sea@exicom.in

SAUDI ARABIA

14181, 8667 King Fahad Road
Olaya, Riyadh 12611 , Saudi
Arabia cpsales.sa@exicom.in

Disclaimer:

This document may contain forecast information, including but not limited to future finances, operations, product series, new technologies, etc. Due to practice the uncertainty in the actual results may differ from the predicted information. Therefore, the information in this document is for reference only and does not constitute any offer or promise. Exicom may modify the above information without notice.