

# 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 plugin and user friendly registration for easy maintenance
- Multi-application use
- Global Compliance

### 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: Signalling, communication equipment and control & protection

# Serenity 48V/2000W - Technical Specifications



AC INPUT	
Voltage	90 - 300Vac
Frequency	45 - 66Hz
Maximum Current	12.0A
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-in inrush current limiting Output fuse Over temperature shut-off
Efficiency	Peak 95.5%

OTHER SPECIFICATIONS	
Operating Temperature	-40 to +75°C, linear derating from 50°C 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 (Alarms)	On - Input low / high, rectifier in power de-rate mode, current limit
Red (Alarms)	Flash - Rectifier comm. fail On - Abnormal temp or input shutdown, low O/p voltage alarm, over-voltage shutdown on output Flash - Rectifier fan fail

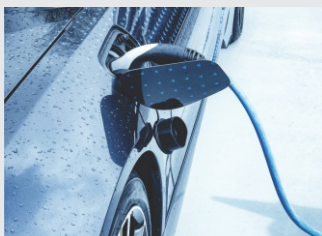
APPLICABLE STANDARDS	
Electrical Safety	EN 60950-1
EMC/EMI	EN 55022 (Class B), EN 55024
Environmental	EN 300019-1-1/-2/-3, ROHS complied

PART NO.	DESCRIPTION
HE-513140	Serenity 48V/2000W Rectifier

Specifications are subject to change without notice

Web: [www.exicom-ps.com](http://www.exicom-ps.com)

## Mobility Solutions



## DC Telecom Solutions



## ESS Solutions



## Contact

- 📍 Plot No. 77 A, IFFCO Road, Sector 18, Gurugram, Haryana 122015
- ✉ [Contact@exicom.in](mailto:Contact@exicom.in)
- ✉ [Sales.India@exicom.in](mailto:Sales.India@exicom.in)
- ✉ [Sales.APAC@exicom.in](mailto:Sales.APAC@exicom.in)
- ✉ [Sales.Africa@exicom.in](mailto:Sales.Africa@exicom.in)
- ✉ [Service@exicom.in](mailto:Service@exicom.in)