

Serenity 48V/3000W

High Efficiency Rectifier



Exicom's new telecom rectifier Serenity 48V/3000W combines advanced design for reliability and an industrial leading efficiency of 96%. 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. It also comes with optional integrated distribution cabinet giving customers flexibility to meet higher power demands in tight spaces as per telecom requirements

Key Features:

- High efficiency of 96.0% & high power density with 12KW in 1U shelf
- Wide operating input voltage and temperature range
- Small and Large: Can support installations from 3KW to 300KW
- Hot Plug and user friendly registration for easy maintenance
- Multi-application use
- TUV and CE Compliance

Applications:

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

Serenity 48V/3000W - Technical Specifications



AC INPUT	
Voltage	90– 300V ac
Frequency	45-66Hz
Maximum Current	18.0A
THD	<5%
Power Factor	Typical 0.99
Quiescent Power	< 15W typical
Input Protection	Off < 85 – 310V ac < Off Self Protection upto 420V ac Auto Shut-off, Auto-restart Line & Neutral input fuses MOV transient protection
Galvanic Isolation	
Input to Output	3000 V ac
Input to Ground	1500 V ac
Output to Ground	500 V ac

DC OUTPUT	
Voltage	54.0V; Adj: 42.0 - 58.0V
Output Power	3,000W above 185 Vac
Maximum Current	62.5A at 48V
Current Sharing	+/-5% of max. current above 10% Load
Static Voltage regulation	+/-0.5% from 10% - 100% load
Dynamic Voltage Regulation	+/-5% for 10% - 90% load
Ripple Noise	<300 mV p-p 30MHz bandwidth <2mVrms psophometric
Output Protection	Over Voltage Shutdown Overload Foldback Short Circuit Proof Output Fuse Protection Over Temperature Shut-Off Hot-plug Inrush Current Limiting
Efficiency	Peak 96.0%

OTHER SPECIFICATIONS	
Operating Temperature	-40°C to +75°C, Linear derating from 40°C onwards
Storage Temperature	-40°C to +85°C
Cooling	Forced Air
Humidity: Operating	5% to 95% non-condensing
Storage	Upto 99% non-condensing
Acoustic Noise	Less than 55dB(A)
MTBF	>300.000 hrs. Telcordia SR-332
Dimensions	106x50x360(mm) 4.1"x1.9"x14.2"
IP rating	IP20
Weight	2.2kg (4.8 lbs)
Alarms	AC Input Abnormal AC over / Under Voltage Rectifier OK / Fail Communication Failure Fan Fail Output OVP Output Low Voltage 2 Phase Operation Temperature Shut Down Rectifier OK / Fail AC Over / Under Voltage Output Over/Under Voltage Communication Fail Fan Fail / Temp. Shut Down
Visual Indicator	Output Over/Under Voltage Communication Fail Fan Fail / Temp. Shut Down
MTBF	320,000 Hours

APPLICABLE STANDARDS	
Electrical Safety	EN 60950
EMC	EN 61000-6-1 EN 61000-6-2 EN 61000-6-4
Harmonics	EN 61000-3-2
Environmental	EN 300 019-2-1 EN 300 019-2-2 EN 300 019-2-3

PART NO. DESCRIPTION	
HE-512865	Serenity 48V/3000W SMR

Specifications are subject to change without notice

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