

# Telecom Power Supply

## OPG2000H rectifier module

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### OPG2000H

#### 48V/2000W High Efficiency Rectifier Module



The innovative design makes great customer advantages of high efficiency, reliable and cost-effective.

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### APPLICATIONS

#### • BTS, FIBER AND SWITCH TELECOM

Telecommunication carriers consume more and more energy, reducing the power consumption is carriers' overwhelming society duty, and they have to cut TCO by power saving to face competition.

High efficiency and standard efficiency and modules are mixable to maximize cost-saving and power system efficiency.

#### • NETWORK ACCESS

For medium and small power network access, because of giant numbers, the cost-effective and higher efficiency module are key components of power supply operation in indoor/outdoor harsh environment with high reliability.

#### • DATA CENTER, POWER SERVER AND COMPUTER

The high efficiency module is also designed for data center to replace UPS power, comparing with UPS' s born disadvantage---low efficiency, low reliability, high maintenance cost, the high efficiency module suits for data center excellently.

#### • EMI PROTECTION AND RELIABILITY

DSP control with advanced software ensures the overall functions to meet almost all requirements from customers.

The basic protection of input/output fuse, and input/output low voltage/over voltage protection, also high level protection of power de-rated when input low voltage and high temperature, and temperature regulated fan speed, all these functions create high reliability. Hot-plug and easy maintenance

The monitor will automatically recognize new plug module and communicate, and communication between modules via RS485 for load sharing even when the monitor is fault.

The module is spring screw locked with its light weight and small dimension, zero setting, the module replacement is non-tool and very easy, the low technology worker is certificated.

### AC INPUT

voltage	85~300VAC ( nominal100~240VAC)
frequency	45~65Hz
power factor	≥0.99@220VAC/50A, ≥0.98@220VAC/25A
input protection	L-line fuse15A Varistors for transient protection
THD	≤5%(for 50~100%load)

### DC OUTPUT

voltage	+53.5VDC
output power	2000W(175~300VAC), 1800W(155~174VAC) 1000W(85~154VAC)
maximum current	37.5A
current sharing	5%
dynamic voltage regulation	±5.0% for 10-90% or 90-10%load variation, regulation time <200us
load regulation	±0.5% from 10% to 100%load
ripple and noise	< 200 mV peak to peak, 30 MHz bandwidth, < 2 mV rms psophometric
output protection	Oversvoltage shutdown Hot swappable - Inrush current limiting Fuse Short circuit proof High temperature protection

### DESIGN STANDARDS

safety	IEC60950-1
EMC	EN 61 000-6-1 (immunity, light industry)
	EN 61 000-6-2 (immunity, industry)
	EN 61 000-6-3 (emission, light industry)
	EN 61 000-6-4 (emission, industry)
environment	ETSI EN 300 019-2 RoHS compliant

### OTHER SPECIFICATIONS

efficiency	≥96%@220VAC@peak
isolation	3.0 KVAC – input and output 1.5 KVAC – input earth 0.5 KVDC – output earth
indicator LEDs	green--normal yellow--protection warning red--failure
alarms	Low main shutdown High temperature shutdown Rectifier Failure Output overvoltage shutdown Fan failure
warnings	Rectifier in power de-rate mode Remote battery current limit activated Input voltage out of range Low voltage alarm LVD activated
operating temp	-40~+55°C 100% power output +55~+65°C, 50% power de-rated output
storage temp	-40~+70°C
cooling fan	air flow front to back
MTBF	500000 hours
acoustic noise	50dB
humidity	10~95% no condensing
dimensions	107×295×42mm(W*H*D)
weight	1.7kg

Output Current-Efficiency Curve

