

AMB8030H is a micro-processor switching mode single-phase rectifier module to provide the -48V/30A DC power for telecommunications and sensitive industrial applications.

The interior circuit of rectifier module is adopted the full bridge rectifier, phase shift modulation technology and power factor compensation technology. This serves maximize efficiency 91% or above during 90% load condition, The power factor 0.99 or above and operating frequency at 150KHz.

### Major features :

- **Wide input voltage range**

The rectifier can be normally operated in areas with poor or unstable power, ranging from 175V to 275V AC input.

- **Input Transient Voltage Protection**

MOVs are installed to protect AC voltage transient and spike.

- **Easy paralleling** For higher output currents

Simply install the modules and the automatic load share will balance the currents no need for adjustment

- **Hot pluggable.**

The system need not be shut down when changing module

- **Micro-processor control**

All connections to rectifier and other rack module via RS-485 interface

- **Active current share**

Active current share deviation less than 3%



- **Fan cooled**

A DC fan with Interior temperature controlled is used to maximize reliability

- **Over voltage protection**

When output voltage exceeds 57Vdc, rectifier will be shut down instantly.

- **Over temperature protection**

When internal temperature exceeds safety limit, rectifier is inhibited and LED is activated.

- **Conducted EMI**

EN50081-1、 EN50081-2 & EN50082-1

- **Audible noise** < 48 dBA

### Application :

- Mobile station
- Small capacity PABX, PBX
- Fiber optics transmission
- Other -48Vdc power critical

# Specifications :

## AC input

Nominal voltage : 220Vac Single phase  
Operating voltage : 175 275Vac(1P2W+G)  
Frequency range : 45 65Hz  
Current : 4A(220V)  
Power factor : 0.99 at 60% Load(220Vac)  
Efficiency : 91% at 60% Load(220Vac)  
Inrush current : < rate input current  
EMI : EN50081-1、 EN50081-2 & EN50082-1.

## DC output

Float Voltage : adjustable 44 ~ 58VDC  
Equalize Voltage : adjustable 44 ~ 58VDC  
Power Max. : 1500 Watts  
Current : 0 30A  
Current Limit : adjustable 5 30A  
Voltage regulation :  
Line effect  $\pm 0.2\%$  ( 220Vac $\pm 15\%$  )  
Load effect 0.5% ( 0 100% )  
Current share : <  $\pm 3\%$   
Soft start : 3 sec  
Dynamic transient response :  
MAX 5% , 1ms recovery < 1%  
Static response :  $\pm 0.2\%$   
Psophometrics : 2mV  
Wide band noise : 10mVrms ( 10k~100MHz )  
Audible Noise : 48 dBA

## Protections

AC main low : Rectifier shut down when input voltage is low than 175Vac, and automatically turns on after mains is recovered.  
AC main high : Rectifier shut down when input voltage is higher than 275Vac, and automatically turns on after mains is recovered.  
Output over current : Red LED is on, if the current exceeds the preset

## LED indicators :

Green — Nominal  
Orange — Minor alarm  
Red — Major alarm

## Mechanical

Dimensions : 132(H)\*65(W)\*266(D)  
Weight : 2 Kg

## Others

Temperature : -5 ~50  
Humidity : up to 90% RH ( non-condensing )  
Altitude : < 3000meter  
MTBF : > 10 years

