



HPR6800HF High Power Rectifier (HPR)



Features

- ➔ Wide input voltage range
- ➔ High efficiency, power factor and power density
- ➔ Compact in size and operational within height of 3U
- ➔ Hot-swappable, swift and convenient installation
- ➔ Excellent current share accuracy
- ➔ Microprocessor based intelligent monitoring and control
- ➔ Equipped with user friendly LCD and keypad interface
- ➔ Equipped with RS485, I²C interface for external communication
- ➔ Equipped with ISP function, enable software on site upgrade
- ➔ Comprehensive fault detection and protection schemes
- ➔ Comply to international standards

The HPR6800HF series of rectifier modules are designed for the 48V telecommunications main exchange and core center applications including GSM, 3G, HSDPA, SDH, SONET, Optical Backbone, Microwave, Satellite Links and etc..

By incorporating advanced PWM and zero current switching technology, the rectifiers perform AC to DC power conversion at high input power factor (0.99) and efficiency (91%).

The rectifiers are functioned by multilevel of protection circuitry (input Over Voltage Protection, output Over Voltage Protection, output Over Load Protection, Over Temperature Protection) preventing abnormal operations and damages. The range of output current limit and output voltage of AcBel rectifiers are widely adjustable and therefore suitable for any telecommunication equipment.

The rectifiers exhibit excellent current share performance ($\pm 1\%$) when they are operated in parallel configuration.

The rectifiers are modular and hot swappable in design. All power and signal connections are located on a single connector at the rear of the rectifiers. Wiring on the energy system is hence straightforward. Rectifier installation and maintenance can also be carried out swiftly and conveniently.

All these features contribute to an energy system which is a flexible configuration to meet different power consumption requirements and to achieve N+1 redundancy.

Technical Specifications

Technical Specifications in Brief

AC Input

Nominal voltage	3Φ4W 380Vac; 3Φ3W 220Vac
Operating voltage range	156 ~ 495Vac (3Φ4W); 90 ~ 286Vac (3Φ3W)*
Frequency	45 ~ 65Hz
Efficiency	>91% (nominal input voltage; 54Vdc, 50% ~ 100% load)
Power factor	>0.99 (nominal input voltage; 54Vdc, 50% ~ 100% load)

DC Output

Nominal voltage	54Vdc
Voltage adjustable range	40 ~ 60Vdc (float and equalize mode)
Maximum power	6800W, 142A@48V
Voltage regulation	<±0.5%
Current share tolerance	<±1% (50% ~ 100% load)

Environment

Operating temp. range	-20°C ~ +60°C
Relative humidity	10% ~ 90% (non-condensing)

Visual Indications

Back-lit LCD panel

Reading Display: Output Voltage, Output Current, Rectifier Temperature

Alarm Display: AC Abnormal, AC Breaker Tripped, Output Over current, Over Temperature, Output Over voltage/Under voltage, Fan Fail, Communication Fail

Green LED	Rectifier in normal operation
Red LED	Rectifier in fault condition

Mechanical

Cooling	Forced-Air (high reliability fan with temperature controlled)
Dimension (H x W x D)	132.6mm (3U) x 482.6mm x 375.5mm
Weight	19kg

* Output power will be derated at input voltage <266Vac (3Φ4W) or <154Vac (3Φ3W).

Safety Compliances

All products comply with International Standards. For more detailed specifications, please contact to your nearest AcBel sales representative.

North America	UL
Europe	CE, TUV

All illustrations are for reference only and specifications subject to change without notice.