LPR1080HB Low Power Rectifier (LPR)

Features

- Wide input voltage range
- High efficiency, power factor and power density
- Compact in size and operational within height of 1U or 3U
- Hot-swappable, swift and convenient installation
- Excellent current share accuracy
- Microprocessor based intelligent monitoring and control
- Equipped with RS485, interface for external communication
- Equipped with ISP function, enable software on site upgrade
- Comprehensive fault detection and protection schemes
- Comply to international standards

The LPR1080HB series of rectifier modules are designed for the 48V telecommunications network access applications including NGN, WiMAX, Data Comm, VoIP, CPE, PABX, FTTH 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 (92%).

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 (±3%) 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	220Vac single phase
Operating voltage range	90 ~ 300Vac
Frequency	45 ~ 65Hz
Efficiency	>92% (220Vac; 54Vdc, 40% ~ 90% load)
Power f actor	>0.99

DC Output

Nominal voltage	54Vdc
Voltage adjustable range	43 ~ 58Vdc (float and equalize mode)
Maximum power	1080W, 22.5A@48V
Voltage regulation	<±0.5%
Current share tolerance	<±3% (50% ~ 100% load)

Environment

Operating temp. range	-20℃ ~ +70℃
Relative humidity	10% ~ 90% (non-condensing)

Visual Indications

Green LED	Rectifier in normal operation
Orange LED	Rectifier in minor fault status
Red LED	Rectifier in major fault status

Mechanical

Cooling	Forced-Air (high reliability fan with temperature controlled)
Dimension (H x W x D)	132.5mm (3U) x 43.5mm x 262.0mm
Weight	1.5kg

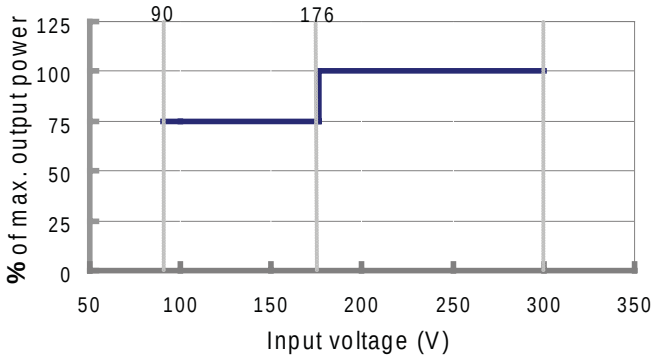
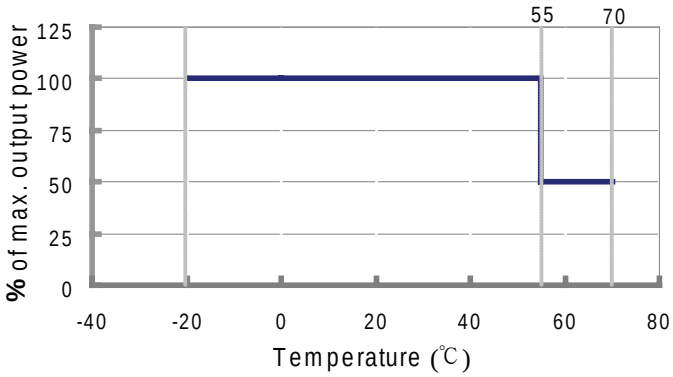
Safety Compliances

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

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

Output Power Characteristics

Output power vs. Input voltage



Output power vs. Temperature