

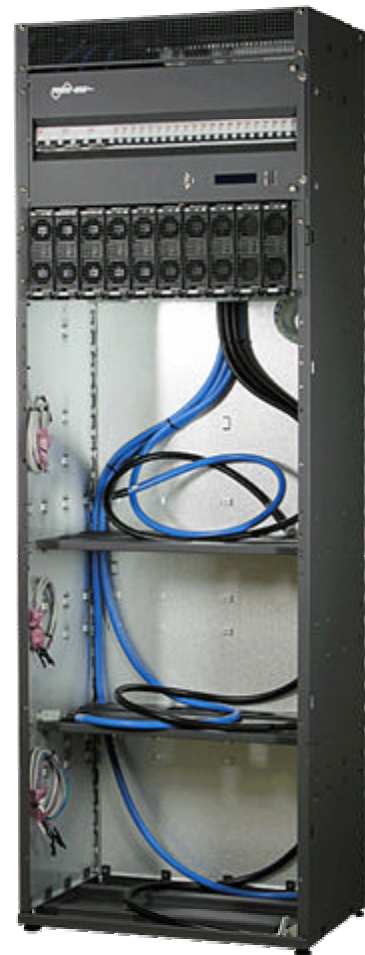
Description

PPS 16 modular DC power shelf and cabinet systems are designed to meet rigid telecom applications with very high reliability and flexibility for future expansion. These shelf power solutions provide rectification, system management and power distribution while maintaining high reliability and offering flexibility for future expansion. The PPS 16 Power Systems are based on hot-swappable rectifier modules (FMP 16.48) output power available at 1600W per module.

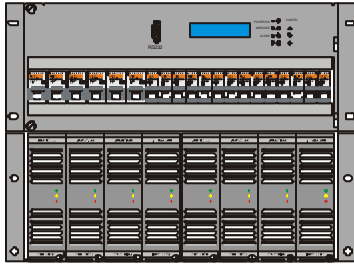
System management is accomplished through messages and alarms displayed on the system controller's (PCS) LCD screen and can also be displayed remotely via the PC-based PowCom™ software package.

Features

- Up to 16kW/320A power and 680Ah battery backup per cabinet
- Simple installation and operation
- LCD display for self-guided controller operation
- Interfaces standards include RS232, and Form "C" dry alarm contacts with grouped alarms
- Site programmable supervision unit
- Intelligent battery management
- Optional Ethernet (SNMP compatible) interface plug-in unit
- International standards compliance



System Configurations



Shelf Solutions (19in.)

A single shelf solution that combines rectifiers, DC distribution, and monitoring in a single shelf. This system can accommodate up to 8 rectifier modules, a supervision module (PCS) and a DC distribution with up to 4 battery breakers and 14 load breakers.

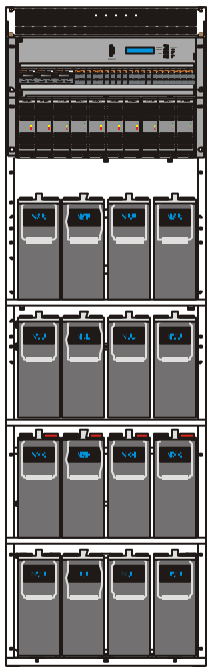
- Up to 256A/ 12.8kW/ 48V per shelf
- 2- 6 battery breakers



Shelf Solutions (23in.)

A single shelf solution that combines rectifiers, DC distribution, and monitoring in a single shelf. This system can accommodate up to 10 rectifier modules, a supervision module (PCS) and a DC distribution with up to 6 battery breakers and 20 load breakers.

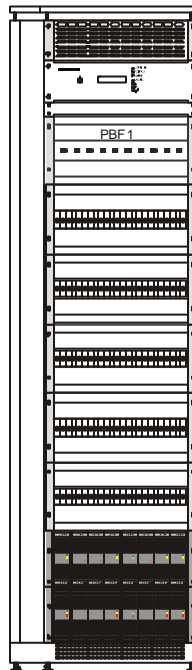
- Up to 320A/ 16kW/ 48V per shelf
- 2-6 battery breakers



Cabinet Solutions (with Batteries)

A floor cabinet solution that combines rectifiers, DC distribution, backup batteries and monitoring in a single footprint. This system can accommodate up to 10 rectifier modules, a supervision module (PCS) and a DC distribution with up to 6 battery breakers and 20 load breakers.

- Up to 320A/ 16kW/ 48V per cabinet
- Space for 680Ah backup batteries per cabinet
- Footprint - 600 x 600mm or 600 x 400mm
- Height - 1800 or 2000mm



Cabinet Solutions

The PPS 16.48-25600 is a floor cabinet solution with a built-in DC bus that enables the connection of rectifier subracks and battery load/ breaker shelves. This system can accommodate up to 16 rectifier modules, a supervision module (PCS) and DC distribution with a wide range of plug-in DC load distributions (low and high ohmic) offering flexible configurations that meet numerous site requirements.

- Up to 512A/ 25.6kW/ 48V per cabinet
- Mating expansion cabinet allowing growth to 1024A
- Internal DC bus for simple plug-in of load distribution modules, battery breaker modules and rectifier subracks
- Internal data bus for advanced system monitoring and control
- Wide range of plug-in DC load distributions (low and high ohmic)
- Easy configuration of both internal and remote DC distribution
- Footprint - 600 x 400mm
- Height - 2150 or 1750mm

PPS 16 Power System

Cabinet & Shelf Systems

System Components

Rectifier Modules

The PPS 16 system utilizes plug-in rectifier modules that are based on a soft-switching approach. Features include 3 LEDs for rectifier status indication, thermal shutdown, and input overvoltage disconnection with an automatic reset.

Model	Input	Output	Power (max.)	Current (max.)
FMP 16.48	85-275V AC	48VDC	1600W	32A



Controller

Advanced system supervision is accomplished using a microprocessor based control module that allows both local and remote system monitoring.

PCS Features

- Menu guided operation
- RS232 interface for remote operation
- Enhanced battery management and testing
- Temperature compensation
- Site programmable flash EPROM
- Supervision for up to 128 rectifiers and 128 micro processors
- Multiple language choices
- Programmable alarms, logic functions, and operations
- Monthly data logging
- Optional Ethernet interface through SNMP and/or TCP/IP



Rectifier subrack

The PPS 16 rectifier subrack is available in 19" and 23" formats

Model	No. of positions	Max output	Fixing
PPR 16/10 23" 400d	10	16kW	23"
PPR 16/8 19" 400d	8	12,8kW	19"



10 position subrack



8 position Subrack

PPS 16 Power System

Cabinet & Shelf Systems

Input

Model	19" Shelf	23" Shelf	16kW Cabinet	25.6kW Cabinet
Input	230/415V 3-phase input	230/415V 3-phase input	230/415V 3-phase input	230/415V 3-phase input
Inputs (max.)	2	2	2	2

Output

Rectifier Modules (max.)	8	10	10	16
Battery Outputs	2 to 6	2 to 6	2 to 6	4xMCCB
Load Outputs	14	20	20	Up to 120xMCCB LOD or HOD
48V DC	Yes	Yes	Yes	Yes

Expansion

Expansion Rack	N/A	N/A	N/A	Up to 16 rectifiers
Expansion Cabinet	N/A	N/A	Up to 20 rectifiers total	Up to 32 rectifiers tota

Battery

Battery Symmetry Inputs	4	4	4	4
Low Voltage Battery Disconnect (LVBD)	Yes	Yes	Yes	Yes
In-Cabinet Battery	N/A	N/A	Up to 680Ah using 4 x170Ah	N/A

Mechanical

Dimensions (WxHxD)	483x355x300 mm 19"x8U	483x355x300 mm 23"x8U	600x2000x600 or 600x1800x600	600x2150x400 or 600x1750x400
Cable Entry	Top	Top	Top	Top and bottom
Plug-in for multiple subbracks and PDU's	N/A	N/A	N/A	Yes

Options

Temp. Comp. Charge	Yes	Yes	Yes	Yes
Ethernet Network Interface	Yes	Yes	Yes	Yes
Modem Interface	Yes	Yes	Yes	Yes

Note: All specifications are subject to change without notification