

Description

PPS 10 modular DC power cabinet systems provide large power plant features in cost-effective, rack-mounted form factors. These cabinet power solutions provide rectification, system management, and power distribution while maintaining high reliability and offering flexibility for future expansion. The PPS 10 systems are based on hot-swappable rectifier modules with constant output power available at 1000, 1100 or 1300W per module.

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

Features

- High reliability
- Simple installation and operation
- LCD display for self-guided controller operation
- Interfaces standards include RS232, and Form "C" dry alarm contacts with grouped alarms
- Intelligent battery management:
 - Temperature compensation (requires optional cables)
 - Programmable battery load testing with data logging
 - Symmetry (requires optional cables)
 - Programmable low voltage disconnect
- Optional Ethernet (SNMP compatible) interface module
- Natural convection cooled - no fans
- International standards compliance



System Configurations



PPS 10-10400 System

A split cabinet solution, that allows the power cabinet to be used as a stand alone wall cabinet, or to be installed directly above a battery cabinet. This system can accommodate up to eight rectifiers, a supervision module (PCS) and DC distribution with up to six battery breakers and twenty load breakers. This system can also be easily expanded by paralleling additional slave cabinets.



PPS 10-18200 System

A floor cabinet solution that contains two rectifier subracks and space for mounting batteries at the base of the cabinet. This system can accommodate up to fourteen rectifiers, a supervision module (PCU/PCS) and DC distribution with up to six battery breakers and twenty-one load breakers. This system can also be easily expanded by paralleling additional slave cabinets.



PPS 10-23400 System

A floor cabinet solution with a built-in DC-bus that enables the plug-in connection of rectifier subracks and battery/ load breaker shelves. This system can accommodate up to eighteen rectifiers, a supervision module (PCS) and DC distribution with a wide range of plug-in DC load distributions (low and high ohmic). This system offers flexible system configurations to fit most site requirements.

System Components

Rectifier Modules

The PPS 10 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.

Rectifier Features

Model	Voltage	Power (max.)	Current (max.)
PMP 10.24A SIC	24V DC	1000W	43A
PMP 11.48 SIC	48V DC	1100W	22A
PMP 11.60 SIC	60V DC	1100W	19.5A
PMP 13.48 SIC	48V DC	1300W	28A
PMP 13.48 SIC WIR*	48V DC	1250W	27A

* WideInput Range (100 - 240V AC)



Supervision Modules

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

PCU Features

- Menu guided operation
- RS232 interface for remote operation
- Battery management and testing
- Low voltage battery disconnect (LVBD)
- Partial load disconnect (PLD)
- Temperature compensation
- Battery symmetry measurement
- Optional Ethernet interface through SNMP and/or TCP/IP

PCS Features

All of the features listed under PCU above, plus:

- Advanced battery management and testing
- Digital signal collection via internal RS485 bus
- Site programmable flash EPROM
- Multiple language choices
- Programmable alarms
- Programmable logic functions and operations
- Monthly data logging



PPS 10 Power System

Cabinet System

Input

Model	PPS 10-10400	PPS 10-18200	PPS 10-23400
Input	230/400V 3-phase 208-240V 1-phase Site configurable	230/400V 3-phase 208-240V 1-phase Site configurable	230/400V 3-phase 208-240V 1-phase Site configurable
Inputs (max.)	Single input	Single input per rectifier subrack	Single input per rectifier subrack

Output

Rectifier Modules (max.)	8	14	18
Battery Outs - MCB (100A)	6	6	Adjustable for site
Load Outs - MCB (2-63A)	20	21	Adjustable for site
24V DC Version	Yes	Yes (with PCS and max. one rectifier shelf)	Yes
48V DC Version	Yes	Yes	Yes
60V DC Version	Yes (on request)	Yes (on request)	Yes (on request)

Features

Supervision	PCS	PCU/PCS	PCS
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Expansion

Expansion subrack	N/A	Yes	Yes
Expansion Cabinet	Yes	Yes	N/A

Battery

Battery Symmetry Inputs	3	3/4	4
Low Voltage Battery Disconnection (LVBD)	Yes	Yes	Yes
In-Cabinet Battery	Yes	Yes	N/A

Mechanical

Dimensions (WxHxD)	Power Cabinet: 600x700x400mm Battery Cabinet: 600x1130x400mm 600x1130x600mm	600x1800x400mm 600x1800x600mm 600x2000x400mm 600x2000x600mm	600x1750x400mm 600x2150x400mm
Cable Entry	Top	Top	Top/Bottom

Options

Temp. Comp. Charge	Yes	Yes	Yes
Integrated Surge Arrestors	Yes	Yes	N/A
Partial Load Disconnect	Yes	Yes	Yes
Hinged Door Access	Yes	Yes	Yes
Battery Cover	Yes	Yes	N/A
Ethernet Network Interface	Yes	Yes	Yes
Modem Interface	Yes	Yes	Yes

Note: All specifications are subject to change without notification.