



PECO II®

**180 Amps @ -48VDC or
200 Amps @ +24VDC**

MCS-1800 Power Shelf



- ▶ **Compact Power Plant**
Increased power density and design flexibility allow the system to grow with up to four modules in one shelf.
- ▶ **Uninterrupted Operation**
Rectifier modules may be added to the system without interruption of service. As demand increases, plug-in rectifiers enable the system's growth without the need for additional system wiring.
- ▶ **Remote Management**
The MCS-1800 power shelf is equipped with both an RS-232 direct connect/modem and RJ-45 Web Interface for local or remote monitoring and control. This functionality offers system management tools over Internet/Intranet environments.



■ ■ PRODUCT DESCRIPTION

The MCS-1800 series power system combines a compact, modular design with intelligent power features and state-of-the-art technology. The power system is capable of providing 180 Amps at -48VDC using up to six 30 Amp rectifiers or 200 Amps at +24VDC using up to four 50 Amps rectifiers. An intelligent control and supervisory unit is embedded in the power shelf to provide alarms and comprehensive system control. The MCS-1800 power shelf is a feature-rich system offering a host of standard features including temperature compensation, voltage control, and remote access.

- ▶ Hot swappable 1800W (-48Vdc) / 1500W (+24Vdc) rectifiers
- ▶ Battery disconnect breakers
- ▶ Optional low voltage disconnect
- ▶ Temperature compensation voltage control
- ▶ Equalize timer
- ▶ User friendly interface
- ▶ Optional RJ45 remote management web server function
- ▶ 8 Alarm LEDs
 - Float, equalize, HV, LV, major, minor, HVSD, AC fail
- ▶ 6 Alarm extension relays
 - AC fail, major, minor, fuse, HVSD, HV

■ ■ SPECIFICATIONS

POWER SHELF

System Capacity	48VDC: -48VDC / 30A - 180A(48VDC / 30A rectifier x 1 - 6) 24VDC: +24VDC / 50A - 200A (24VDC / 50A rectifier x 1 - 4)
AC Input	90 - 275VAC, single-phase
Operating Temperature	+32°F to +122°F (0°C to +50°C)
Storage Temperature	-40°F to +158°F (-40°C to +70°C)
Humidity	0 - 95% non-condensing

RECTIFIER

INPUT

Input Voltage	176 – 275VAC (100% load), single-phase 151 – 175VAC (80% load) 90 – 150VAC (50% load)
Input Current	<12A (low line input, full load)
Line Frequency	45 – 65Hz
Power Factor	>0.99, 220VAC, full load
THD	<5%, 220VAC, full load
Efficiency	≥90% for ESR-48/30B @ full load, 220VAC ≥88% for ESR-24/50D @ full load, 220VAC

OUTPUT

DC Output Voltage	ESR-48/30B: 40 – 60VDC ESR-24/50D: 20 – 29VDC
Output Power	ESR-48/30B: 1800W (0°C to +50°C) 1500W (+50°C to +65°C) ESR-24/50D: 1500W (0°C to +50°C) 1200W (+50°C to +65°C)
Regulation	Load < ± 0.5% Line < ± 0.1%
Current Limit	110% of rated output current
Noise	Audio Band < 2mV CCITT Wide Band <20mVrms (10KHz – 100MHz) Acoustic <55dBA @ 1M

■ ■ CONFIGURATIONS



Complete 2U High Power Shelf with CSU and Rectifiers



Complete 3U High Power Shelf with CSU and Rectifiers



Complete 3U High Power Shelf with CSU, Power Distribution and Rectifiers



Complete 6U High Power Shelf with CSU and Rectifiers

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