



## Description

Xscend modular DC power shelf systems provide large power system features in cost-effective, rack-mounted form factors. These shelf power solutions provide rectification, system management and power distribution while maintaining high reliability and offering flexibility for future expansion. The Xscend systems are based on hot-swappable rectifier modules with constant output power available at 1400 (24V) or 1600W (48V) per module.

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

## Features

- AC Input 185-275 VAC (85-185VAC at de-rated output)
- 48VDC rectifier with up to 1600W output
- 24VDC rectifier with up to 1400W output
- Fan cooled rectifier modules
- Front access design
- Temperature hardened -40°C to +65°C
- 19" or 23" mounting arrangement
- Extensive remote monitoring capabilities
- Modular DC distribution with LVD
- Power Factor Correction
- ETSI Compatible
- Modular system from 32A to 640A

## System Configurations



### **Xscend 23in. System**

An all-in-one 3U-9U (single and four shelf configurations) high shelf system that can be installed in 23" telecom cabinet solutions. The system subrack can accommodate up to 20 rectifier modules, a supervision module (XCS) and DC distribution with up to 10 circuit breakers (0-4 battery and 6-10 load breakers). Optional expansion distribution shelf allows 25 circuit breakers.

### **Xscend 19in. System**

An all-in-one 3U-9U (single and four shelf configurations) high shelf system that can be installed in 19" telecom cabinet solutions. The system subrack can accommodate up to 16 rectifier modules, a supervision module (XCS) and DC distribution with up to 10 circuit breakers (0-4 battery and 6-10 load breakers). Optional expansion distribution shelf allows 20 circuit breakers.

## System Components

### Rectifier Modules

The Xscend system utilizes plug-in rectifier modules that are based on a soft-switching approach. Features include 3 LEDs for power-on, current limit & thermal protection, and module failure.

#### Rectifier Features

Model	Voltage	Power (max.)	Current (max.)
<b>XR 1648</b>	48V DC	1600W	32A
<b>XR 1424</b>	24V DC	1400W	56A



### Supervision Modules

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
- Battery management and testing
- Temperature compensation
- Battery symmetry measurement
- Optional Ethernet interface through SNMP and/or TCP/IP
- 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



### Distribution Module

Advanced distribution is accomplished using a 5U high external distribution shelf. The shelf is based on standard plug in circuit breakers and is available in 23in. and 19in. configurations.



# Xscend™ Power System

## Shelf System

### Input

Model	Xscend 23" Shelf	Xscend 19" Shelf
Input	205-250 VAC +/-10%	205-250 VAC +/-10%
Inputs (max.)	Single or multiple inputs	Single or multiple inputs

### Output

Rectifier Modules (max.)	20	16
Battery Outputs - MCB (max.)	4	2
Load Outputs - MCB (max.)	10	8
External Distribution (max.)	25	20
24V DC Version	Yes (up to 2 shelves)	Yes
48V DC Version	Yes	Yes

### Features

Supervision	XCS	XCS
Expansion	Yes	Yes

### Battery

Battery Symmetry Inputs (max.)	3	3
Low Voltage Battery Disconnection (LVBD)	Yes	Yes

### Mechanical

Dimensions (WxHxD)	584x133x274mm (23x5.25x10.8in.)	483x133x274mm (19x5.25x10.8in.)
Mounting	23"	19"
Cable Entry	Rear	Rear

### Options

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

Note: All specifications are subject to change without notification.