GENERAL DATACOMM

Xedge 6280 Chassis

Versatile 10-Slot Chassis System for MultiService Applications

Figure 1: Xedge 6280 Chassis System

INTRODUCTION

The Xedge 6280 is modular 10-slot chassis that allows full redundancy by employing main and standby slot-0 controllers, main and standby switch fabric, and backup power supplies. It also accommodates one Network Timing Module (NTM) for advanced system timing configurations. The Xedge 6280 is available in AC and DC power source versions. The chassis may be deployed as a standalone desktop unit, front-mounted in 19-inch rack/cabinet, or mid-mounted in 23-inch rack/cabinet.

The front panel provides easy installation for one or two Xedge switch fabric modules and up to seven Xedge slot controllers of any type:

- Xedge XS or XH Switch Fabric Module
- Xedge cell controllers (ACP, ACS or ECC)
- Xedge adaptation controllers (CE, FRC, CHFRC, ETH, VSM)
- Xedge packet controllers (PCX, PCE, ISG2, PCL, etc.)

The Xedge 6280 rear panel provides connectors for power sources, management, grounding and alarm connections. One DB-25F connector is used for contact alarms. A shorting bar located on the rear of the chassis provide for the connection, separation, or isolation of frame and signal grounds as required.

Supported LIMs, SMMs

Rear panel slots accommodate one or two Xedge line interface modules (LIMs) for each installed slot controller. A dedicated rear panel slot is also provided for one System Management Module (SMM) which has two DB-9 management ports (Manager and Auxiliary) that provide local access via an asynchronous terminal.

FEATURES & BENEFITS

- Modular chassis installs in an open or standard 19-inch rack or cabinet, flush-mount or midmount, or as a standalone desktop unit.
- Accepts one or two (redundant) switch fabric modules
- Accepts one or two (redundant) slot-0 slot controllers, and accepts up to six additional slot controllers
- Supports input and power supply redundancy
- Rear panel slots accommodate one or two Xedge line interface modules for each installed slot controller.
- Modules can be installed or extracted without powering down the shelf (hot-swappable).
- Air flow is provided by six fans, each delivering 55 cubic feet per minute (cfm).
- Supports environmental status and alarms control.
- Provide a signal and chassis ground connection point.

Chassis Power

The rear of the chassis provides two slots for Power Input Modules (PIMs) and four slots for Power Supply Units: Main (0), Standby (1), Backup Main (2) and Backup Standby (3). This power arrangement allows for power input redundancy and power supply redundancy.

The Xedge 6280 chassis is available in an AC or DC model. The AC-version uses one or two GPS-16A autoranging power supplies that automatically adapt to AC power inputs ranging from 90 to 264VAC.

The DC version uses one or two DPS-16A autoranging power supplies that automatically adapt to DC power inputs ranging from -42 to -70 VDC.

![General Datacomm logo](G GENERAL DATACOMM)

Xedge 6280 Chassis

Physical Specifications

Dimensions

Height: 8.75 in (22.2 cm)
Width: 17.7 in. (45 cm)
Depth: 19.25 in. (48.9 cm)

Module Capacity

Two dedicated front slots accept switch fabric modules (XS or XH).

Two dedicated front slots accept slot-0 controllers (Main and Standby)

Factory-installed Link Personality Modules (LPMs):
LPM-1, LPM-2, LMP-3, LPM-4, LPM-5, LMP-6, LPM-CE

Seven front slots accept single-width or double-width Xedge slot controllers with 1 or two compatible LIMs per controller.

Single-width slot controller modules:
ISG2, VSM, CE, FRC, CHFRC, ETH, ECC, ACP, ACS

Dual-width slot controller modules:
PCX/PCX2, PCE, PCL

Module/LIM Applications

The Slot Controller/LPM/LIM Bundle installed at the factory supports a variety of LIM applications:

LPM-1: Uses two Utopia LIMs
LPM-2: Uses one Utopia LIM (LIM1) and one SERDES LIM (LIM2)
LPM-3: Uses one Serial LIM (LIM1) and one SERDES LIM (LIM2)
LPM-4: Uses two SERDES LIMs
LPM-5: Uses two Serial LIMs
LPM-6: Uses one Serial LIM (LIM1) and one Utopia LIM (LIM2)
LPM-CE: Uses two selected Serial LIMs (with PCE only)

Serial LIMs	Utopia LIMs	SERDES LIMs
DS1-2CS	DSX1-IMA	OC-N/STM-N
DS1-4CS	E1-IMA	AVM (Voice)
DS3-2C	155M-2	T1/E1 MP16
E1-2CS	155I-2	T1/E1 HDCC
E1-4CS	155L-2	
E3-2C	155M-APS	
LCE-16	155I-APS	
ASIO	155L-APS	
ASIO-HSSI (DCE)	155E-2	

Port Capacity

All Xedge chassis types can support a variety of controller/LIM combinations. The following matrix provides a simplified indication of each chassis' maximum port capacity by interface type, assuming PCE/ASIO, PCE/DS3-2C, PCX-2/T1/E1 MP16, and PCX-2/LCE-16.

Chassis Type	Redundant Power	Redundant SW Fabric	Redundant Slot-0	Maximum DS1 Ports	Maximum DS3 Ports	Maximum Serial Ports	Maximum Subrate Ports
Xedge 6002	NO	N/A	N/A	32	2	8	32
Xedge 6160	2 AC or 2 DC	1	NO	64	4	16	16
Xedge 6280	4 AC or 4 DC	2	YES	96	6	24	96
Xedge 6640	4 AC	2	YES	224	14	56	224
Xedge 6645	4 DC	2	YES	224	14	56	224

Environmental Specifications

Non-Operating

Temperature -40 deg. to 158 deg. F (-40 deg. to 70 deg. C)
Altitude: 0 ft. to +40,000 ft. (0 m to +12191 m)

Operating

32 deg. to 122 deg. F (0 deg. to 50 deg. C)
Relative Humidity: 5% - 95% non-condensing
Altitude: 0 ft. to +10,000 ft. (0 m to +3048 m)

Power Specifications

Xedge 6280 AC Version (P/N 010B209-001)

Power Supply P/N: 035B011-002
Capacity: Two or four power supplies

Input Voltage Range: 90 to 264 VAC
Input Frequency: 50 to 60 Hz
Maximum Power Consumption: 350 W (with two power supplies)
Service Current Requirement: 15A
Fuse Rating: 6.3A, 250 VAC, each power supply
Heat Dissipation: 1,195 BTU/hr, maximum

Xedge 6280 DC Version (P/N 010B210-001)

Power Supply P/N: 041B011-001
Capacity: Two or four power supplies

Input Voltage Range: - 42 to - 70 VDC
Maximum Power Consumption: 350 W (with two power supplies)
Fuse Rating: 10A, 250 VDC, each power supply
Heat Dissipation: 1,195 BTU/hr, maximum

Compliance & Compatibility

CISPR 22 Class A, FCC 15 Class A, EN55022, EN55024
UL Listed (60950)
c-UL Listed (CSA C22.2 #950)
TUV licensed (EN60950)
CE Mark
Quality Assurance: ISO 9001: 2000 Certified