iConverter

iConverter® 1 Module Redundant Power Chassis with Power-over-Ethernet (PoE) Option

*Module not included.

The *iConverter* 1-Module Redundant Power Chassis is ideal for mission-critical Customer Premises (CP) Ethernet services, and in applications where the monitoring of external events is required.

The chassis supports multiple power sources, configurable 10/100 Ethernet ports and a wide variety of alarm options.

Power source options feature load-sharing combinations of Power-over-Ethernet (PoE), 9-24VDC and 24-60VDC. The PoE option is designed for applications where the converter chassis must be physically located where power is unavailable or is costly to install. Power is provided to one of the chassis' optional 10/100 network ports from a Power Source Equipment (PoE/PSE) such as a switch or a Mid-Span power injecting device.

The 9-24VDC power sources can be connected via barrel-style or terminal connectors. The barrel-style connector versions are shipped with US or universal AC/DC power adapters.

The two optional 10/100 RJ-45 network ports are available with PoE optional on one of the ports. Auto-negotiation, 10/100 and Half/Full-Duplex modes can be configured for each port.

Four optional contact-closure alarm sensors are available for monitoring external events. These sensors can be used to monitor a backup battery, the state of an enclosure's door or other environmental device states. An SNMP trap can be selectively generated upon the occurrence of any of these monitored events.

The chassis can be remotely managed when an *iConverter* module with integrated management (such as the 10/100M2) is installed in the chassis. The management module provides monitoring, remote configuration and trap notification.

The monitoring of external events, redundant power, PoE and 10/100 network ports make the *iConverter* 1-Module Redundant Power Chassis ideal for mission-critical Service Provider and Enterprise network applications.

- 1-Module *iConverter* Redundant Power Chassis with dual redundant power source options

- Supports the following Power Options:

    - Power-over-Ethernet (IEEE 802.3af PoE/PD)

    - Low Voltage DC Power 9-24VDC (terminal or universal AC/DC adapter available)

    - High Voltage DC Power 24-60VDC

- Two (2) optional 10/100 configurable Ethernet ports

- Four (4) optional contact closure alarm sensors

- Managed via an installed *iConverter* Media Converter with Integrated Management (such as a 10/100M2)

- Management supports Monitoring, Remote Configuration and Trap Notification

- Features Dying Gasp Trap support

- Commercial (0 to 50°C), wide (-40° to 60°C) and extended (-40° to 75°C) temperature ranges

- Lifetime Warranty and free 24/7 Technical Support

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MANAGEMENT

The chassis can be remotely managed when used with an *iConverter* media converter with integrated management. Management can be accessed through a menu-driven command-line interface (CLI) via Telnet or the Serial Console Port, or can be accessed through a SNMP-based graphical user interface (GUI) such as Omnitron's *NetOutlook* management software.

The intuitive *NetOutlook* network management software provides real-time detailed port and module information as well as parameter configuration and event monitoring.

NetOutlook can be used as a stand-alone application under Windows 9X/XP/NT/2K/Vista or integrated with third-party SNMP management software.

Using *NetOutlook* , fixed parameters that can be monitored on the Redundant Power Chassis include the chassis type and model, manufacturing information, along with hardware and software revisions.

The management can monitor and configure the states of the 10/100 ports, monitor the power sources and generate traps upon different link, power, temperature and contact closure events.

APPLICATION EXAMPLES

1) Power-Over-Ethernet Applications

Figure 1 depicts an application where the chassis contains an *iConverter* 10/100M2 copper-to-fiber converter, and does not have access to a power source. In Figure 1(A), chassis power is provided by a Mid-Span device inserted between the chassis and a standard switch to inject power into the UTP cable. In Figure 1(B), the chassis is powered by a switch that supports PoE/PSE via the UTP cable.
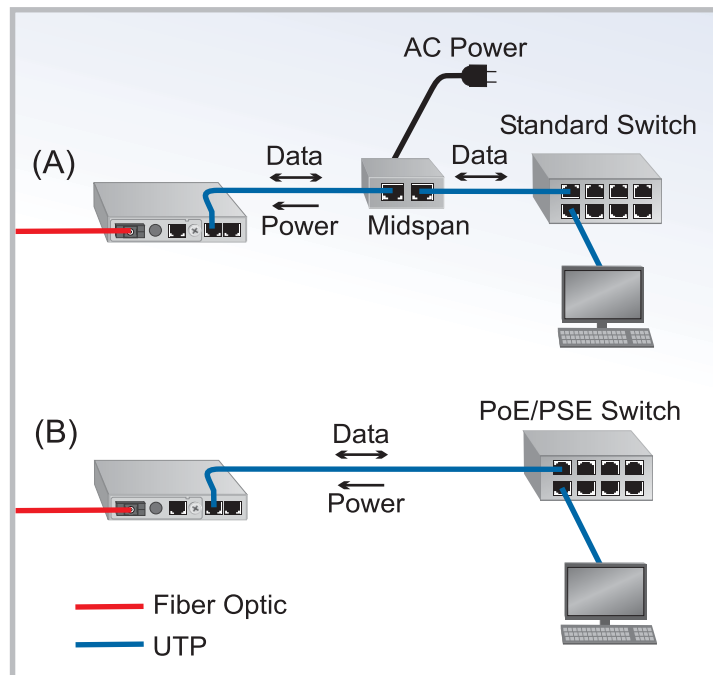

Fig. 1 PoE Chassis Powered by a Midspan device and a PoE/PSE Switch

2) Using Contact Closure Sensors

Figure 2 depicts an application where battery backup power is required, and the chassis is connected to an Uninterruptible Power Supply (UPS) battery. The battery provides power to sustain chassis operation in the event of a power outage. The UPS battery also provides alarm status for utility power, low battery reserve and battery error via the contact closures on the chassis.
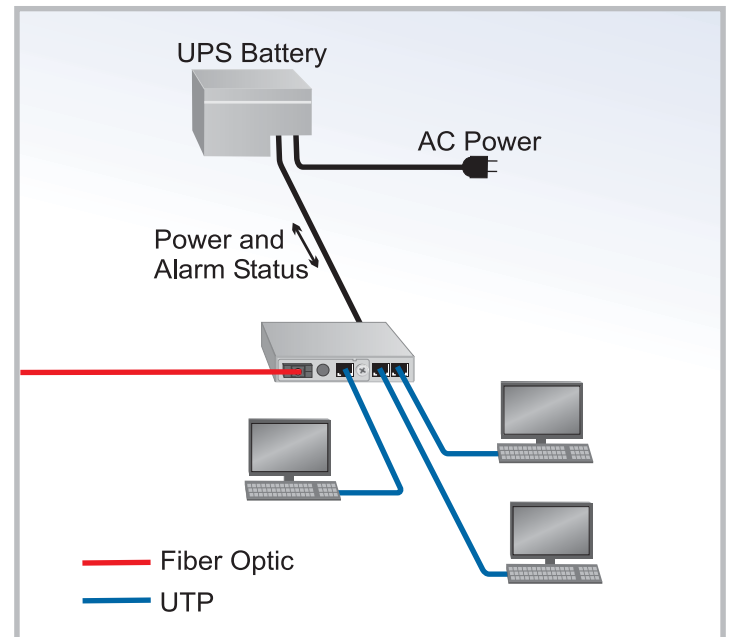

Fig. 2 PoE Chassis with UPS Battery Back-Up

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3) Daisy Chain Network Application

Figure 3(A) depicts a Daisy Chain network configuration with an *iConverter* 2FXM2 fiber-to-fiber converter installed in each chassis. Figure 3(B) depicts a resilient ring configuration that requires a fiber spanning tree switch at the network core, and an additional fiber link (dotted line).
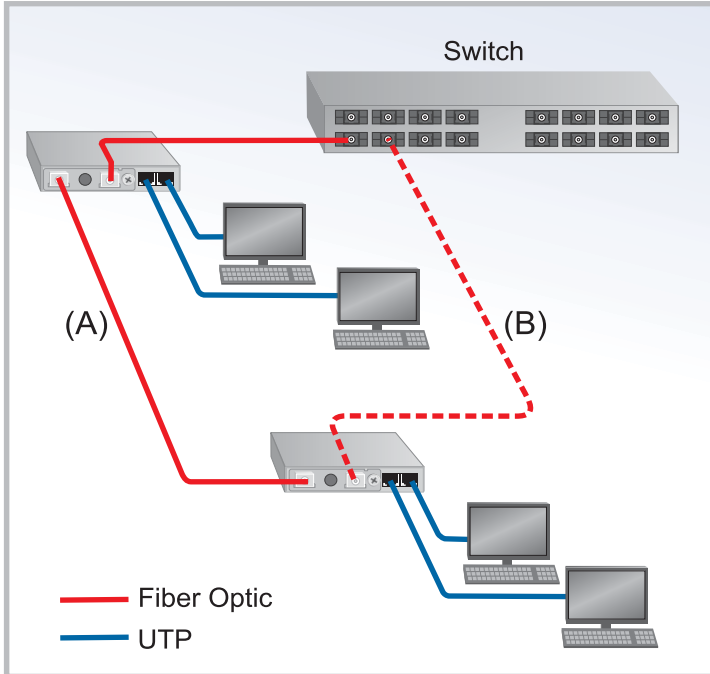

Switch

(A)   (B)

— Fiber Optic
— UTP

Fig. 3 PoE Chassis with 2FXM2s in a Fiber Resilient Ring Configuration

The *iConverter* family of managed fiber access media converters are used in Service Provider access networks and Enterprise LANs. *iConverter* media converters provide fiber connectivity with copper to fiber, multimode fiber to single-mode fiber, or dual fiber to single-fiber conversions.

Description	1-Module Redundant-Power Chassis (PoE)
Ports	2 x RJ-45 (optional)
Protocols	10BASE-T, 100BASE-TX with 1536 max. frame size
Cable Types	
UTP	EIA/TIA 568A/568B
Connector Types	
UTP	RJ-45 (optional)
Contact Closure Sensors	Field-wireable 16-24 AWG
Power Requirements	
Low Voltage DC Power	9 to 24VDC 1.5A @ 9.0VDC
Low Voltage DC Power Connector	2.5mm Barrel Connector or Field-wireable 16-20AWG Terminal Connector
High Voltage DC Power	+24 to +60VDC or -24 to -60VDC isolated 0.3A @ 48VDC
High Voltage DC Power Connector	Field-wireable 16-20AWG Terminal Connector
PoE Power	+44 to +57VDC or -44 to -57VDC 0.27A @ 48VDC
PoE Connector	RJ-45 IEEE 802.3af-2003 Alternative A & B, Pre-standard Cisco PoE
AC Power Adapter (US)	100-120VAC /60Hz 0.2A @ 120VAC
AC Power Adapter (Universal)	100-240VAC / 50-60 Hz 0.2A @ 120VAC
Dimensions	W: 5.4" x L: 6.8" x H: 1.0"
Weight	
without power adapter	1.5 lbs.
with power adapter	2.0 lbs.
Compliance	UL, CE, FCC, AS/NZS 3548, & VCCI Class A
Temperature	
Operational - Commercial	0 to +50º C
Operational - Wide Range	-40 to +60º C
Storage	-40 to +80º C
Humidity (non-condensing)	5 to 95%
Altitude	-100m to 4000m
MTBF (hrs)	
Chassis	540,000
with US power adapter	250,000
with Intl. power adapter	100,000

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ORDERING INFORMATION

Model	Contact Closure	Two UTP RJ-45 Ports	Primary Power				Backup Power		AC/DC Power Supply
			Low Voltage DC-Barrel (9-24V)	Low Voltage DC-Terminal (9-24V)	High Voltage DC-Terminal (24-60V)	RJ-45 PoE	Low Voltage DC-Barrel (9-24V)	Low Voltage DC-Terminal (9-24V)	
8245-111			x				x		Two US
8245-112			x				x		Two Univ.
8246-111		x	x				x		Two US
8246-112		x	x				x		Two Univ.
8246-511		x				x	x		One US.
8246-512		x				x	x		One Univ.
8247-111	x		x				x		Two US
8247-112	x		x				x		Two Univ.
8247-121	x		x					x	One US
8247-122	x		x					x	One Univ.
8247-220	x			x				x	-
8247-311	x				x		x		One US.
8247-312	x				x		x		One Univ.
8247-320	x				x			x	-
8248-111	x	x	x				x		Two US
8248-112	x	x	x				x		Two Univ.
8248-121	x	x	x					x	One US.
8248-122	x	x	x					x	One Univ.
8248-220	x	x		x				x	-
8248-311	x	x			x		x		Two US.
8248-312	x	x			x		x		Two Univ.
8248-320	x	x			x			x	-
8248-511	x	x				x	x		One US.
8248-512	x	x				x	x		One Univ.
8248-520	x	x				x		x	-

For Wide Temperature chassis (-40 to 60°C), add a "W" to the end of the part number. For example 8248-520W.
Consult factory for extended temperature (-40 to +75°C) models.
Dying Gasp functionality requires installation of a management module that supports Dying Gasp.

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