XPand6102

Small Form Factor (SFF) System Featuring XPedite5205 Running Cisco IOS® and XPedite7450

- ❯ Runs Cisco IOS® software

- ❯ Cisco Unified Communications Manager Express (CME) support

- ❯ Cisco Mobile Ready Net, which allows for mobile ad hoc networking and radio aware routing

- ❯ Hardware acceleration and encryption

- ❯ Integrated threat control using Cisco IOS Firewall, Cisco IOS Zone-based Firewall, Cisco IOS Intrusion Prevention System (IPS), and Cisco IOS Content Filtering

- ❯ Identity management using authentication, authorization, and accounting (AAA) and public key infrastructure

- ❯ 7.70 in. (L) x 4.88 in. (W) x 2.10 in. (H)

- ❯ XPedite5205: Three router ports via RJ-45

- ❯ XPedite5205: Console and AUX serial port via mini-DB9

- ❯ XPedite7450: One Ethernet port via RJ-45

- ❯ XPedite7450: Two serial ports via mini-DB-9

- ❯ XPedite7450: Two USB ports

- ❯ XPedite7450: Mini DisplayPort connector

- ❯ XPedite7450: Three isolated GPI and three isolated GPO

- ❯ One Ethernet link internally between XPedite5205 and XPedite7450

- ❯ Natural convection cooling

XPand6102

The XPand6102 is a Small Form Factor (SFF) system that features an XPedite5205, which runs Cisco IOS® Software with Cisco Mobile Ready Net capabilities, and an XPedite7450 for general processing. The combination of XPedite5205 and XPedite7450 provides a high-performance router with plenty of computing power for any application. The XPand6102 can be utilized as a development platform or a deployed system.

The XPedite5205 uses the same Cisco IOS® that IT staffs in the military, energy, public safety, and other industries are already trained on, enabling these organizations to expand their network to personnel, equipment, facilities, and vehicles at the edge of the network – warfighters on the battlefield, mines and drilling platforms, natural disaster mobile command centers – without any additional training. The XPand6102 can be connected to UHF, VHF, Wi-Fi, and other IP-based radio platforms to create the network nodes used to form mobile ad hoc networks (MANETs). With the ability to operate without a connection to central infrastructure, MANETs offer many advantages for military, public safety, and emergency response users. The XPedite5205 extends the Cisco enterprise infrastructure beyond the reach of traditional fixed-network infrastructure for oil and gas, mining, smart grid, heavy construction, transportation, homeland security, and public safety applications.

The router offers high performance, four Gigabit Ethernet interfaces, and a rich Cisco IOS Software feature set for the most Size, Weight, and Power (SWaP)-constrained applications. To meet the needs of demanding mobile and embedded networking applications, the XPand6102 provides hardware encryption, radio aware routing (RAR) with support for the latest Dynamic Link Exchange Protocol (DLEP), support for IPv6, integrated threat control with integrated Cisco IOS firewalls and Intrusion Prevention System (IPS), and Quality of Service (QoS).

The XPedite5205 is packaged in a natural-convection-cooled horizontal enclosure with four commercial RJ-45 connectors. For rugged applications, the system can be packaged in an XPand6000 Series enclosure with D38999 circular connectors.

X-ES

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Physical Characteristics

Dimensions do not include connectors

- 2.10 in. (H), 4.88 in. (W), 7.70 in. (L)
- Weighs less than 4 lbs.

Configuration

- Includes XPedite7450 Intel® Core™ i7 ruggedized COM Express module
- XPedite5205 Cisco IOS® router
- Slim SATA SSD module

XPedite5205 Front Panel I/O

- Three RJ-45 connector to 10/100/1000BASE-T Ethernet ports
- Two micro-DB-9 connectors to RS-232 serial ports

XPedite7450 Front Panel I/O

- One RJ-45 connector to 10/100/1000BASE-T Ethernet port
- Two micro-DB-9 connectors to RS-232 serial ports
- One Mini DisplayPort connector for graphics
- Two USB 2.0 connectors to USB 2.0 port
- Three isolated general-purpose inputs
- Three isolated general-purpose outputs

Misc Front Panel I/O

- Declassify push button
- Integrated reset and power switch
- Status LEDs

Power Supply Options

- Integrated MIL-STD-704 28 VDC input voltage power supply with MIL-STD-461 EMI filtering
- External 110 VAC input voltage power supply for development