

# Intel Express Hubs

*A family of Fast Ethernet hubs for optimizing network performance.*



*Intel Express Hubs offer a flexible transition to Fast Ethernet performance for any size network.*

- Intel Express 10/100 Stackable Hub, 12-port
- Intel Express 10/100 Stackable Hub, 24-port
- Intel Express 10/100 Stackable Hub Modules
- Intel Express Standalone Hub, 8-port

Intel Express Hubs are a family of Ethernet and Fast Ethernet products designed to increase your network response time. They help you move toward Fast Ethernet performance in a gradual, cost-effective transition, realizing performance gains in key network segments as you go.

### *A Flexible Transition for Large Networks*

For larger companies and networks, Express 10/100 Stackable Hubs give you the built-in flexibility of 10 or 100Mbps operation in a shared hub. You define the terms of your transition to Fast Ethernet by configuring the hub to operate at either 10Mbps or 100Mbps. This flexibility allows you to deploy 100Mbps when and where it is needed, while still running 10Mbps to some desktops.

With an entry price of under \$100 per port (U.S. suggested retail price), Express 10/100 Stackable Hubs are not only affordable, they allow you to protect your product investment by extending the hubs' lifespan through the transition from 10Mbps to 100Mbps. There's no need to buy a 10Mbps hub now and a 100Mbps hub later. And you save more than just hardware costs, since you won't have to worry about reinstallation or network redesign.

### *An Economical Solution for Small Companies and Workgroups*

For small companies and workgroups that have historically used shared or switched 10Mbps solutions, the Express Standalone Hub is an economical Fast Ethernet solution that provides a tenfold increase in network performance over standard Ethernet solutions. With this simple-to-install, high-performance, 8-port hub, you can quickly deploy Fast Ethernet connections where the extra bandwidth is most needed.



## Intel Express 10/100 Stackable Hub

*The 10/100Mbps hub for a flexible transition to Fast Ethernet*

### *Choose from 12- or 24-port versions*

Express 10/100 Stackable Hubs come in 12- and 24-port versions that stack up to eight units high. With a maximum of 180 managed ports or 192 unmanaged ports, Express 10/100 Stackable Hubs satisfy the needs of everything from small LANs to large, feature-rich managed networks.

### *Three Expansion Modules*

The 12-port version features a pair of expansion slots, and a choice of modules are available to fit them:

- *An SNMP Management Module for managing and configuring each hub in a stack*
- *A 100BASE-FX Fiber Module for connecting over extended distances, up to 2 kilometers*
- *An Ethernet Module for connecting 100Mbps segments to 10Mbps segments, and for extending collision domains*

### *Management LCD*

An easy-to-read LCD panel on the Management Module simplifies the set up and management of a hub, or stack of hubs. Configuration management may be accomplished through the LCD display on the module or through any SNMP management software. The LCD panel permits the viewing of collision and utilization percentages, as well as set-up configurations. The Management Module enables the administration of both 10 and 100Mbps segments, and allows the hubs to be changed to either speed.

### *Stacking Multiple Hubs*

By utilizing the Intel Cascade Cable to connect the stacked units, you can manage both 10Mbps and 100Mbps network segments with a single Management Module. Cascading stacked hubs with the Cascade Cable allows easy growth of networks because new hubs may be added at 10 or 100Mbps to meet your needs.

### *Network Management*

Intel LANDesk® Network Manager is the best way to configure and manage Intel Express hubs and switches. It allows Windows\*-based management of Express 10/100 Stackable Hubs and Switches, including viewing, configuring, managing and monitoring within a workgroup environment. It supports Windows\* 3.1, Windows 95 or Windows NT\* workstation, and

is compliant with the Microsoft 32-bit TCP/IP stacks, NetManage Chameleon\* and Distinct\* TCP/IP.

Intel Device View for Web is an easy-to-use, Web-based SNMP device configuration tool for use with Express 10/100 Stackable Hubs and Express Switches. Device View for Web supports Microsoft Internet Explorer\* and Netscape Navigator.\*

### KEY FEATURES

- *A cost-effective, 10/100Mbps stackable hub for under \$100 per port*
- *Easier than deploying a 10Mbps hub today and a 100Mbps hub tomorrow*
- *Allows 10Mbps and 100Mbps operation in a single, managed stack*

## Intel Express Standalone Hub

*The high-performance hub for your high-performance PCs*

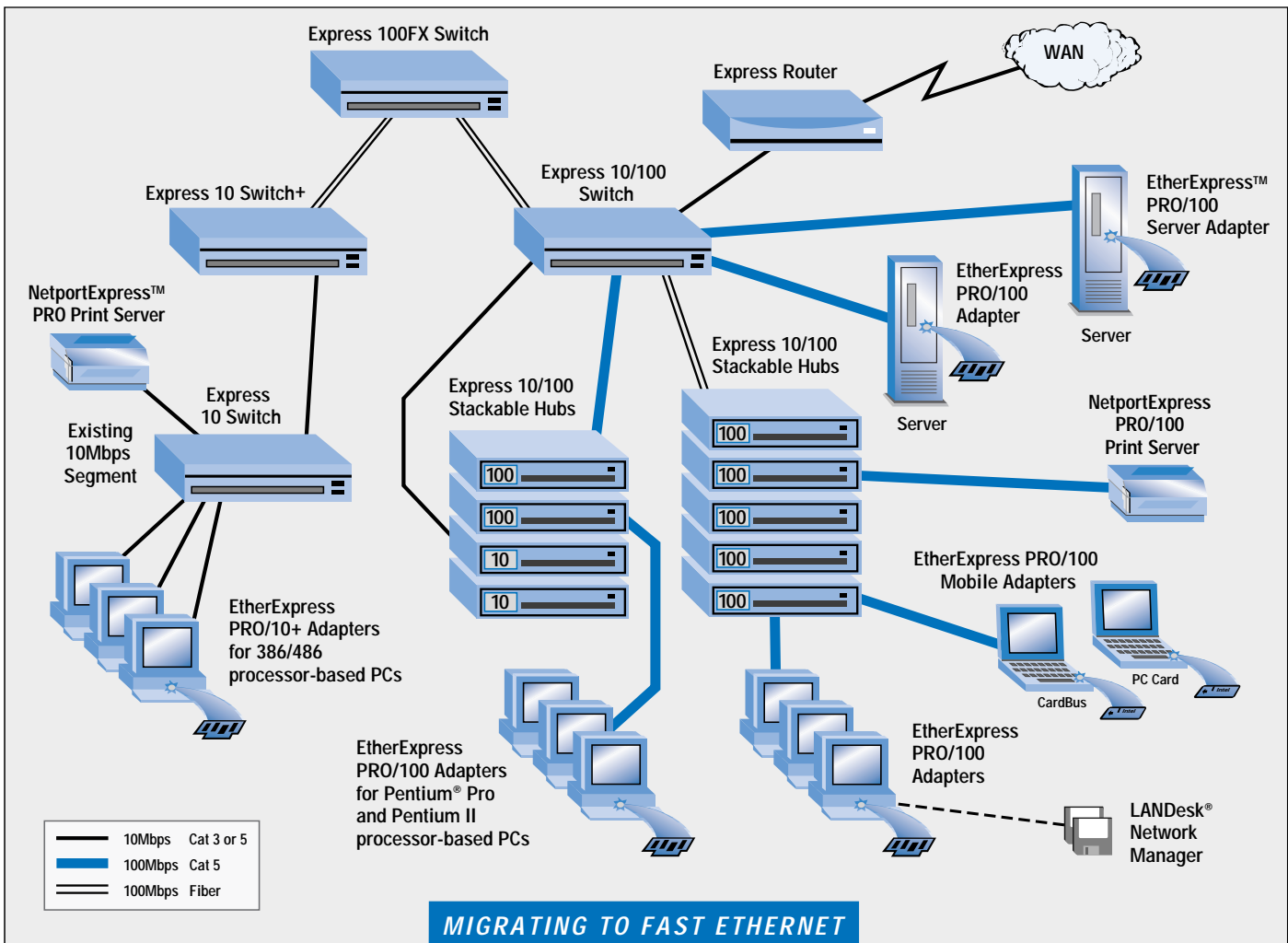
This 8-port hub is the economical choice for Fast Ethernet networking in small workgroups. It allows you to quickly deploy 100Mbps connections where the extra bandwidth is most needed. As your network grows, two hubs can be cascaded together using one of the ports on each hub as a daisy-chain port.

### *Easy to Install – Easy to Use*

Installation of the Express Standalone Hub is exceptionally simple. There are no switches to set and no special software to load. And the advanced architecture of the Express Standalone Hub allows for easy viewing, with 27 LEDs that let you monitor system status, network statistics and port partition/reconnection.

### KEY FEATURES

- *100Mbps Fast Ethernet connections for up to eight PCs*
- *Delivers ten times the speed of regular networks*
- *Quick installation with a simple user guide*



## Intel Fast Ethernet Solutions

Intel's 10/100 Fast Ethernet products fit seamlessly into your existing Ethernet network allowing you to migrate gradually to 100Mbps as your needs evolve. You can future-proof your high-performance Pentium® and Pentium Pro processor-based PCs with EtherExpress™ PRO/100 Adapters, then go to 100Mbps "as needed" using Express Hubs and other Intel products.

### **EtherExpress™ PRO/100 Adapters**

*These Adapters run at 10 or 100Mbps and come in a variety of configurations to meet all your high-performance needs:*

- *EtherExpress PRO/100 TX PCI Adapter for PCI-bus servers and clients using the IEEE 802.3u 100BASE-TX standard.*
- *EtherExpress PRO/100 T4 PCI Adapter for PCI-bus servers and clients using the IEEE 802.3u 100BASE-T4 standard.*
- *EtherExpress PRO/100 TX EISA Adapter for file servers and clients.*
- *EtherExpress PRO/100 TX ISA Adapter for file servers and clients.*
- *EtherExpress PRO/100 Server Adapter for application servers. Equipped with an on-board i960® processor for low CPU utilization, support for Cisco ISL Virtual LANs, and Adapter Fault Tolerance support.*
- *EtherExpress PRO/100 Mobile Adapter, available in 16-bit PC Card and 32-bit CardBus versions.*

Intel's PCI adapters come with Intel Adaptive Technology, so you can optimize adapter performance.

### **Intel Express 10/100 Fast Ethernet Switch**

*A low-cost 10/100Mbps switch for easy migration to Fast Ethernet. With 8 ports and two expansion slots, it deploys dedicated 100Mbps bandwidth to high performance workgroups, while still supporting 10Mbps legacy segments.*

### **Intel Express 100FX Switch**

*This cost-effective Fast Ethernet fiber switch boosts 100Mbps performance even further with Adaptive Technology and Layer 3 Switching. It supports eight 100BASE-FX connections of up to 2 kilometers each.*

### **NetportExpress™ PRO/100 Print Server**

*A high-performance, centrally managed and reliable print server providing 10 or 100Mbps support for easy transition to Fast Ethernet. Available in single-port or 3-port versions.*

## SPECIFICATIONS AND PRODUCT FEATURES

### Intel Express 10/100 Stackable Hubs

#### MAXIMUM CABLING DISTANCE

Switch to Repeating Hub/Workstation Network Interfaces:  
 Category 5 Shielded/Unshielded UTP: 328 feet (100 meter)  
 62.5/125-micron fiber optical cable: 525 feet (160 meter) 3rd line or  
 if Switch-to-Switch with fiber 2km

#### INTERFACE OPTIONS

RJ-45 connectors for Category 5 UTP (two-pair wire)  
 or 100-ohm STP (two-pair wire) 100 BASE-T  
 Ethernet interface

#### CONNECTOR INTERFACES

Optional console management: RS232 DB-9 (female)  
 10/100BASE-TX port: Shielded RJ45 (female)  
 Optional FX module: SC connector

#### ELECTRICAL SPECIFICATIONS

90-135/180-264 VAC (rms) 47-63Hz 55Watt (typical)  
 Heat dissipation/hour: 188 BTU

#### SAFETY AGENCY APPROVAL

UL listed (UL 1950) IEC 950/EN 60 950 (TUV)  
 CE Mark CSA certified (CSA 22.2 #950)

#### PHYSICAL SPECIFICATIONS

Installation options: Tabletop or rack-mountable  
 W x H x D 441mm x 89mm x 330mm (17.35" x 3.5" x 13")  
 19 lbs (8.61 kg)

#### ENVIRONMENTAL SPECIFICATIONS

Operating temperature: 0 to 40 C, 32 to 104 F  
 Storage temperature: -10 to 65 C, 14 to 145 F  
 Relative Humidity: <85% non-condensing

#### ELECTROMAGNETIC EMISSIONS

FCC Part 15, Subpart J, Class A  
 EN 55022 (CISPR22: 1985), Class A  
 VCCI Class 1 ITE  
 EN50082-1

#### ELECTROMAGNETIC SUSCEPTIBILITY

Electrostatic discharge (ESD): IEC 801-2  
 Radiated electromagnetic field: IEC 801-3  
 Electrical fast transient/burst: IEC 801-4

### Intel Express Standalone Hub

#### INTERFACE OPTIONS

Eight 100BASE-TX station ports (shielded RJ-45 connector)  
 One 100BASE-TX daisy-chain port (replaces one station port)

#### ELECTRICAL SPECIFICATIONS

100-240VAC 50/60Hz 1Amp (built-in full-range power module)

#### ELECTROMAGNETIC EMISSIONS

CE mark En50082-1  
 IEC 801.2/PrEN55024-2 IEC 801.3/PrEN55024-3  
 IEC 801.4/PrEN55024-4 IEC 801.6/PrEN55024-6  
 EMI FCC Class B, VCCI Class 2, CISPR 22 Class B

#### SAFETY AGENCY APPROVAL

UL (UL1950), CSA (CSA950), TUV/GS (EN60950)

#### ENVIRONMENTAL SPECIFICATIONS

IEC 68-2-14  
 Operating temperature: 0 to 40 C  
 Storage temperature: -40 to 70 C  
 Relative Humidity 5% to 95% (non-condensing)

#### PHYSICAL SPECIFICATIONS

Dimensions 273mm x 166mm x 43mm (10.75" x 6.54" x 1.69")  
 27 color-coded LEDs for power, network utilization, collision, link,  
 traffic and port partition status

## COMPANION PRODUCTS

Consider these related Intel products as a factor in your network planning.

- *EtherExpress™ PRO/100 Adapters*
- *Express Switches*
- *Express Routers*
- *NetportExpress™ PRO/100 Print Servers*
- *LANDesk® Network Manager*

## CUSTOMER SUPPORT

Intel Customer Support Services offer a broad selection of tiered support programs. For more information: visit us on the World Wide Web at <http://support.intel.com> or call 800-538-3373, ext. 276, or order FaxBack\* 8549 at 800-525-3019.

### FOR PRODUCT INFORMATION

World Wide Web	<a href="http://www.intel.com/network">http://www.intel.com/network</a>
U.S. and Canada	800-538-3373 or 503-264-7354
Europe	+44-1793-431-155
Japan	+81-298-47-0800
Hong Kong	+852-2-844-4524
Taiwan, Korea, Singapore and ASEAN	+65-735-3811
Australia	+61-2-9937-5800

### ORDER CODES

Intel Express 10/100 Stackable Hub, 12-port	EE110TX12
Intel Express 10/100 Stackable Hub, 24-port	EE110TX24
Intel Express 10/100 Workgroup Kit	EE110WKGP12
Intel Express Hub Management Module	EE110MM
Intel Express Hub Ethernet Module	EE110EM
Intel Express Hub Fiber Module	EE110FX
Intel Express Hub Cascade Cable	EE110CC
Intel Express Standalone Hub	EE100TX8

### FOR MORE INFORMATION, ORDER THESE FAXBACK\* DOCUMENTS

EtherExpress™ PRO/100 Adapter Data Sheet	6285
Express Switches Data Sheet	8503
Express Router Data Sheet	1640
NetportExpress™ PRO/100 Print Server Data Sheet	1315
LANDesk® Network Manager Data Sheet	1185
Fast Ethernet Overview and Deployment Guide	6354
The Advantage of Fast Ethernet for New Networks	1308
Intel Branded Products Price List	9000

To order call 503-264-6835, 800-525-3019, or find us on the World Wide Web: <http://www.intel.com/network>