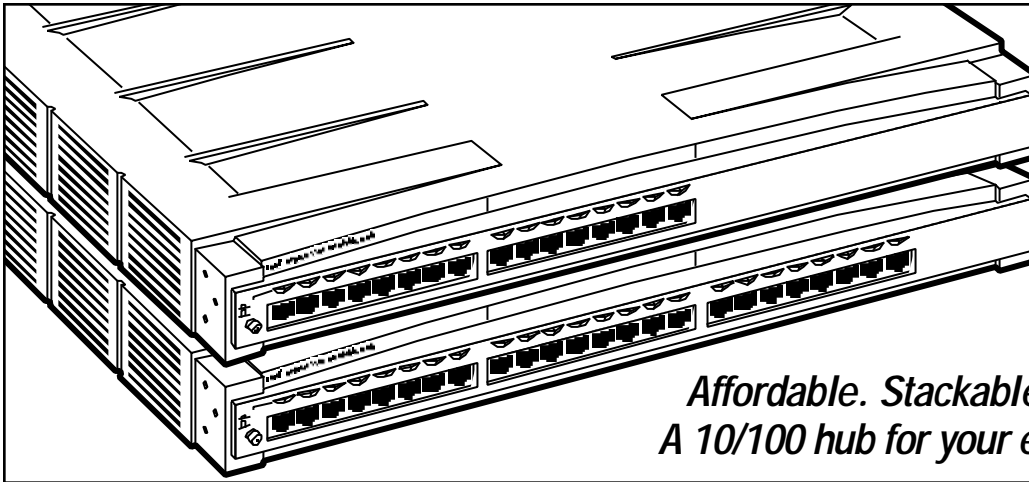




# BLACK BOX<sup>®</sup>

## NETWORK SERVICES

### INTEL EXPRESS 330T STACKABLE HUB



*Affordable. Stackable. Manageable.  
A 10/100 hub for your evolving network.*

#### Key Features

- ▶ **10/100 Mbps autosensing on each port.**
- ▶ **16- and 24-port models available.**
- ▶ **Stack up to 5 units high for a total of 120 ports.**
- ▶ **Slim design increases port density for tight spaces.**
- ▶ **Management module includes Intel Device View and embedded Web server.**
- ▶ **Auto-ranging power supply.**
- ▶ **Port-to-MAC addressing helps ensure network security.**

With its flexible, modular design, the Intel<sup>®</sup> Express 330T Stackable Hub lets you put affordable performance right where you need it, when you need it.

The hub is ideal for medium-sized installations planning to upgrade desktops to 100 Mbps. And it's a flexible workgroup solution for supporting a mixed-bandwidth environment.

Each port automatically senses either 10- or 100-Mbps Ethernet, so you can individually match your network speed to your desktop need. In a mixed environment of 10- and 100-Mbps devices, the 330T hub can provide 100-Mbps speed to servers and power users while simultaneously connecting older 10-Mbps devices.

Both the 16-port and the 24-port models can be stacked together—up to 5 high—to give you up to 120 ports! Simply connect the hubs with the included cascade cable.

Tight on room? Well, these hubs shouldn't be a concern.

Each is only 1 rackmount unit (RU) high, so you're able to fit more ports into a tighter space.

The hub also features two expansion slots for adding optional management and distance-extension capabilities. For instance, to connect to a device at full-duplex, order the Ethernet or fiber module, because the 330T's ports are half duplex. And to manage all the hubs in a stack, order the management module. See [page 3](#) for more information.

LEDs for each hub port indicate port status, individual port speed, and port activity. A solid green LED, for example, indicates to you that your device is properly linked. Want to know whether the same device is connected at 10 or 100 Mbps? Just glance at the port's other LED.

There are LEDs for the whole hub, too. These indicate the condition of the hub, whether a management module is present, and the collision ports per segment.

The 330T hub automatically disables (partitions) a port when an invalid condition occurs, such as too many consecutive collisions. Once the hub is able to transmit data to the port collision-free, it automatically unpartitions the port.

With the hub's port security feature, you're able to prevent unauthorized access of a port by "securing" a specific MAC address on a port. With this feature enabled, the hub remembers the first MAC address it sees on a port. If that address changes, the hub prevents the device from seeing the rest of your network by disabling the port. You can also manually specify a MAC address.

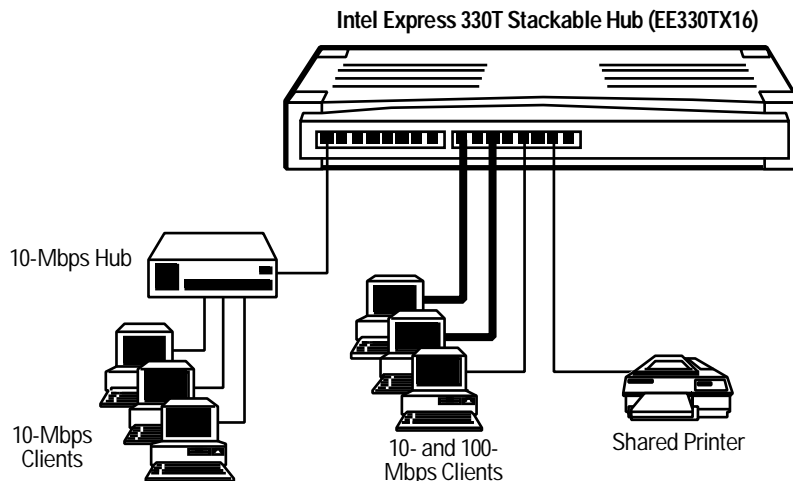
In a stack of 330T hubs, only one bridge is active at a time. If that particular hub fails or is removed, the next hub in the stack automatically provides bridging for the entire stack.

As expected, the hub works with any Ethernet/Fast Ethernet network configuration.

# Growing Your Network.

## Mixing 10 and 100 Mbps:

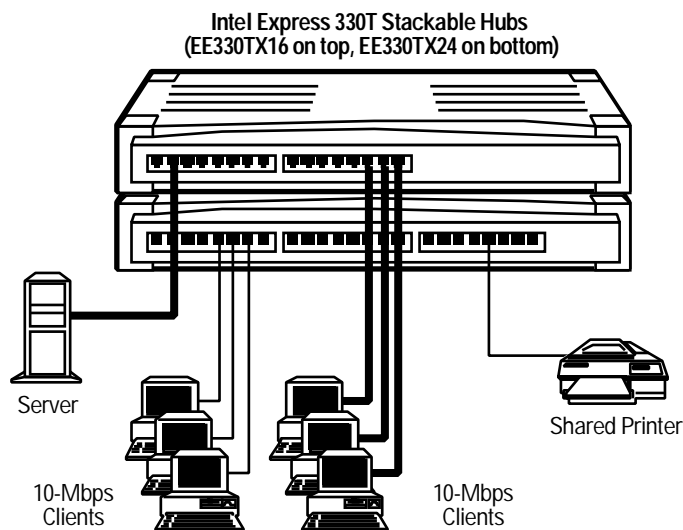
10-Mbps Connection  
100-Mbps Connection



*In a mixed environment, the Express 330T hub can provide the 100-Mbps bandwidth to clients that require it while also providing connections for older 10-Mbps devices.*

## Expanding the network:

10-Mbps Connection  
100-Mbps Connection



*As your clients increase, add another hub for more ports. Using a cascade cable, you can connect the 16-port hub (top) with a 24-port hub (bottom) to create a hub stack. This hub stack now acts as a single hub with 40 ports. You can stack up to five hubs for a total of 120 ports (on five 24-port hubs).*

## Specifications

**Compliance** — CE certified; CSA; FCC Class A, Part 15, Subpart A, EN55022, VCCI, BCIQ; GS S9954074; TUV; UL® listed, E139761

**Standards** — Hubs, EE300FX, EE300EM: IEEE 802.3 10BASE-T, 100BASE-TX; EE300MM: SNMP MIB II, RFC-1213, RS-232

**Protocol** — Hubs, EE300EM, EE300FX: Non-dependent MAC layer; EE300MM: SNMP over IP, RS-232

**Hardware Data Rate** — Hubs, EE300EM, EE300FX: 10/100 Mbps; EE300MM: 9600 bps

**Hardware Type** — Hubs: Hub/MAU; Modules: Other

**LAN Type** — Ethernet

**Software** — EE300MM only: Intel® Device View to automatically discover and map all manageable network devices

**Connectors** — Hubs: Front: (16) or (24) RJ-45; Rear: (2) MD50 F; EE300EM: (1) RJ-45 M; EE300MM: (1) DB9 M;

EE300FX: (1) Male duplex SC® connector

**Diagnostics** — Hubs: LEDs and console program; Modules: LEDs, terminal, or management station

**Indicators** — 24-port model: (57) LEDs total, including (48) total for links; 16-port model: (41) LEDs total, including (32) total for links; Modules: None

**Power** — 100–240 VAC, 47–63 Hz, internal

**Humidity** — 85% noncondensing

**Temperature** — Operating: 32 to 104°F (0 to 40°C); Storage: 14 to 145°F (-10 to +65°C)

**Size** — Hubs: 1.7"H x 17.4"W x 13"D (4.3 x 44.2 x 33 cm); EE300MM: 0.9"H x 5.8"W x 7"D (2.4 x 14.6 x 17.9 cm); EE300FX, EE300EM: 1"H x 3.7"W x 4.4"D (2.4 x 9.3 x 11.9 cm)

**Weight** — Hubs: 8 lb. (3.6 kg)

## Modular Options:

Both versions of the 330T hub include two expansion slots that accept optional Fast Ethernet, fiber, and management modules.

All three cards are designed to automatically configure themselves for their attached device. In fact, you normally don't have to make any changes—only if a connectivity problem occurs.

The **Intel Express Hub Ethernet Module (EE300EM)** connects to devices, such as switches and servers, at full or half duplex and extends your network diameter by 328 ft. (100 m). It bridges 100-Mbps segments to 10-Mbps. And you

don't even need a crossover cable to connect to other switches or hubs. Just use the module's crossover button to switch the Ethernet port from MDI-X to MDI.

If you want even greater distance capabilities, then order the **EE300FX**, the **Intel Express Hub Fiber Module**. Via fiber cable, the module enables you to extend your network up to 524 ft. (160 m) in half duplex and up to 1.2 miles (2 km) in full duplex. Use the fiber module to connect 100BASE-FX devices, such as switches or servers, at full or half duplex. It's equipped with a change duplex

button, which you set to half duplex when you want to connect to a device that can't operate at full duplex.

Another thing to consider: Fiber cabling minimizes electromagnetic interference (EMI), so migrating to fiber may be wise if your network is located in or near areas with a lot of machinery.

For complete control of the Ethernet or fiber module, you'll want to order the **Intel Express Hub Management Module (EE300MM)**.

It enables you to manage up to five hubs in a stack. Use the

module with a Windows® PC, your Web browser, or a Telnet® connection and any SNMP console.

Or you can use the included Intel Device View software to automatically discover and map all of your manageable Intel devices. A single intuitive interface supports Web browsers and Windows and allows you to install, configure, and monitor Intel hubs, switches, routers, and printer servers.

## Hubs Include:

- Cascade cable
- Quick-start manual
- User manual
- Set of rackmount ears
- Country Specific Power Cord

## Modules Include:

- Quick Start manual
- User manual

## Ordering Information

ITEM	CODE
Intel® Express 330T Stackable Hub	
16-Port .....	EE330TX16
24-Port .....	EE330TX24

### For management capabilities, order...

Intel Express Hub Management Module.....EE300MM

### To extend your network, order...

Intel Express Hub Ethernet Module.....EE300EM

Intel Express Hub Fiber Module .....EE300FX

### For optimum performance, be sure to order...

Category 5 Patch Cable, 100-MHz, 4-Pair,  
Straight-Pinned, PVC, Beige,  
10 ft. (3.0-m) .....EVMSL05-0010  
(Other lengths and colors available. *Call us!*)

### For your fiber applications, order our...

Terminated Fiber Optic Cable, Duplex, Riser  
SC-SC, 3.0-m (10-ft.).....EFN4025-003M  
ST-SC, 3.0-m (10-ft.) .....EFN4010-003M  
(Other lengths along with simplex  
and plenum cable available. *Call us!*)