

**Transform a simple
LAN connection into an
intelligent, four-port,
in-the-wall Fast Ethernet
switch**

OVERVIEW

3Com® IntelliJack® switches quickly convert a single-port LAN wall outlet into four switched Fast Ethernet ports. These intelligent, in-the-wall “network jacks” deliver simple, economical connectivity to users in hard-to-wire older buildings, crowded office spaces, public areas and virtually any other networked environment. Unlike conventional switches, 3Com IntelliJack devices take up no horizontal space and are difficult to accidentally disconnect or damage. Each switch delivers traffic prioritization for converged applications.

The 3Com IntelliJack Switch Family (U.S.-standard) offers a choice of three models:

- > IntelliJack Switch NJ220—provides an array of advanced management, switching and security features for copper networks; flexible power options include Power over Ethernet (PoE), local AC power and power forwarding; optional pass-through ports add one or two LAN links.
- > IntelliJack Switch NJ240FX—delivers advanced management, switching and security for fiber LANs and comes with a copper pass-through port; an internal AC power supply with power forwarding is included.
- > IntelliJack Switch NJ100—provides the same features as the NJ220 model, but without the management, switching and security enhancements.



KEY BENEFITS

COST-SAVING INFRASTRUCTURE EXPANSION

With innovative 3Com IntelliJack switches, organizations can quadruple the number of LAN ports in almost any location—incurring significantly lower costs and experiencing less business disruption than if they were to deploy conventional switches and install additional Ethernet cable.

ADAPTABLE DEVICE CONNECTIVITY

One 3Com IntelliJack switch provides four 10/100 Mbps switched ports. The NJ220 and NJ100 models can be equipped with additional LAN connections—optional adapter plates provide pass-through with up to two ports for RJ-11 and/or RJ-45 connectors. The NJ240FX model turns a single, two-fiber multimode cable into four 10/100 switched ports and also provides a pass-through RJ-45 connector for voice or data.

INNOVATIVE IN-THE-WALL INSTALLATION

The compact, wall-mounted units reduce workspace clutter and protect connections from tampering, damage and theft. The switches mount without disturbing walls, making them particularly well suited for older buildings and facilities where installing new wiring is difficult.

FLEXIBLE POWER OPTIONS

Power sources* for IntelliJack NJ220 and NJ100 switches include inline IEEE 802.3af PoE, a local AC power adapter and power forwarding. The NJ240FX model comes with its own internal AC power supply and also supports power forwarding to a downstream device.

CONVERGED SECURE NETWORKING

IntelliJack switches support a number of advanced capabilities for converged networks, including IEEE 802.1p and IP v4 traffic prioritization to ensure the proper quality of service (QoS) levels. To enhance service and security, the IntelliJack NJ220 and NJ240FX can also label voice traffic as high priority and route it through its own virtual LAN (VLAN). Security features for the NJ220 and NJ240FX models include VLANs, IEEE 802.1X network login, MAC filtering and port-based rate limiting by speed and type, helping to prevent network abuse and unauthorized access.

FULL COMPLEMENT OF MANAGEMENT CAPABILITIES

The enterprise-ready IntelliJack NJ220 and NJ240FX switches come bundled with software utilities that help streamline administration tasks. The switches can be discovered and controlled by most SNMP-compliant management platforms, including 3Com Network Supervisor and HP OpenView. 3Com Local Configuration Manager eases installation and configures the switches to support central management, while Central Configuration Manager provides remote monitoring for single switches or groups of switches. In addition, a location-mapping feature aids troubleshooting and IT asset inventories.

SEAMLESS INFRASTRUCTURE INTEGRATION

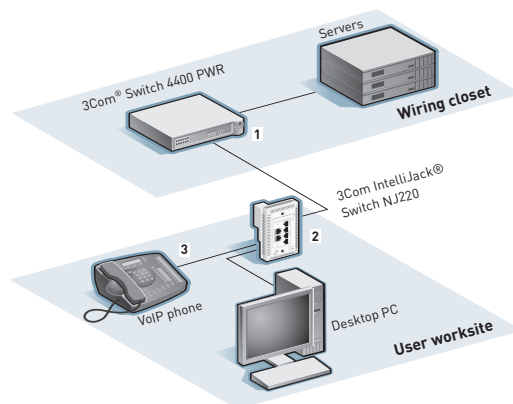
IntelliJack switches fully comply with Ethernet, Fast Ethernet, Voice over IP (VoIP), PoE and relevant building and telecommunications wiring specifications.

* Sold separately.

FEATURE HIGHLIGHTS AND MODEL COMPARISON

Feature	IntelliJack Model		
	NJ220	NJ240FX	NJ100
Quadruples LAN connections by providing four 10/100 switched Ethernet ports	✓	✓	✓
Designed for in-the-wall operation to accommodate virtually any location, reducing installation costs and potential disruption of service	✓	✓	✓
Mounts in standard U.S. wall cutouts; also fits cutouts in Canada, Mexico and other Latin American countries	✓	✓	✓
Accommodates optional pass-through adapter plates for additional RJ-11 and RJ-45 connectors, including AMP, Avaya, Hubbell, Ortronics and Panduit	✓		✓
Provides a copper 10/100 pass-through port		✓	
Complies with Ethernet, VoIP, telecom and building standards	✓	✓	✓
Optimizes converged applications with network traffic prioritization	✓	✓	✓
Includes ToS/DiffServ and multicast flooding control for advanced switching	✓	✓	
Can be supplied with IEEE 802.3af PoE	✓		✓
Runs on local AC power with 3Com IntelliJack Switch Power Supply (3CNJPSL)	✓		✓
Comes with its own AC power supply		✓	
Forwards PoE to another device	✓	✓	✓
Works with standards-based SNMP network management applications, including 3Com Network Supervisor and HP OpenView	✓	✓	
Supports IEEE 802.1X network login	✓	✓	✓
Offers MAC filtering and port-based rate limiting for enterprise-level security	✓	✓	
Supports IEEE 802.1Q VLANs for improved security and monitoring	✓	✓	
Catalogs IntelliJack switches and devices connected to it, facilitating physical locating	✓	✓	
Provides 3Com Local Configuration Manager to streamline installation and configuration	✓	✓	
Provides 3Com Central Configuration Manager for remote monitoring and management from a central location	✓	✓	

DEPLOYMENT OF INTELLIJACK SWITCH AT USER SITE



IEEE 802.3af-compliant Power over Ethernet network configuration with power forwarding to another device:

1. 3Com Switch 4400 PWR delivers data and power over Category 5/5e cabling.
2. The switched ports of the 3Com IntelliJack Switch prioritize voice and data traffic for connected devices.
3. IntelliJack Switch forwards Power over Ethernet to a 3Com IEEE 802.3af-compliant phone or other 802.3af-compliant device.

SPECIFICATIONS

PORTS

IntelliJack Switch

All: four 10/100BASE-TX ports, RJ-45 connectors

NJ220 and NJ100: one 10/100BASE-TX port for uplink

NJ240FX: one multi-mode 100BASE-FX (LC, SC or ST connector available)

Pass-through

NJ240FX: one RJ-45

NJ220 and NJ100: up to two optional RJ-11 and/or RJ-45— requires installation of AMP, Avaya, Hubbell, Ortronics, or Panduit adapter plate in place of blank plate (adapter plates not included in IntelliJack switch 20-packs; must be purchased separately)

Multimode Fiber (NJ240FX)

850 nm wavelength:

50/125 µm cable, 500 MHz•km bandwidth, 3.5 dB/km attenuation

62.5/125 µm cable, 200 MHz•km bandwidth, 3.5 dB/km attenuation

1300 nm wavelength:

50/125 µm cable, 500 MHz•km bandwidth, 1.5 dB/km attenuation

62.5/125 µm cable, 500 MHz•km bandwidth, 1.0 dB/km attenuation

SECURITY

Network login with IEEE 802.1X user authentication

MAC address filtering and port-based rate limiting

POWER OVER ETHERNET (POE)

IEEE 802.3af PoE forwarding through port #1 of device

NJ220 and NJ100 can be provisioned by PoE

MANAGEMENT*

IEEE 802.1Q VLANs, IEEE 802.1p QoS, DHCP; port-level control; location mapping

Compatible with SNMP v1, SNMP v3 (NJ240FX) and most SNMP-compliant management platforms

Supplied with 3Com Central Configuration Manager and 3Com Local Configuration Manager

DIMENSIONS

Switch NJ220, NJ100:

Height: 11.4 cm (4.50 in)

Width: 7.0 cm (2.75 in)

Depth: 5.8 cm (2.30 in)

Switch NJ240FX:

Height: 11.6 cm (4.57 in)

Width: 7.2 cm (2.83 in)

Depth: 4.6 cm (1.81 in)

24-port midspan PSE:

Height: 4.4 cm (1.73 in)

Width: 43.3 cm (17.04 in)

Depth: 30.2 cm (11.88 in)

Single-port midspan PSE:

Height: 2.6 cm (1.02 in)

Width: 6.4 cm (2.52 in)

Depth: 10.2 cm (4.02 in)

AC power supply:

Height: 3.8 cm (1.50 in)

Width: 5.1 cm (2.00 in)

Depth: 8.9 cm (3.50 in)

Extension ring:

Height: 10.2 cm (4.02 in)

Width: 5.2 cm (2.05 in)

Depth: 0.8 cm (0.30 in)

POWER OPTIONS

NJ220 and NJ100: Provisioned by any IEEE 802.3af-compliant PoE source and most 24 VDC and 48 VDC inline sources; 3Com IntelliJack Switch Power Supply (3CNJPSSL) is required where LAN does not have Power over Ethernet

NJ240FX has integral power supply

POWER SUPPLY

NJ240FX (integral): 100-240 VAC, 50-60 Hz

IntelliJack Switch Power Supply (for use with NJ220 and NJ100): 110/120 VAC, 50-60 Hz; supplies 48 VDC

LED INDICATORS

Unit power, link activity/status of ports, power forwarding

ENVIRONMENTAL REQUIREMENTS

Operating temperature: 0° to 35°C (32° to 95°F)

Storage temperature: -30° to 90°C (-22° to 194°F)

Humidity (operating and storage): 10% to 90% non-condensing

IEEE STANDARDS SUPPORTED

IEEE 802.1p (CoS)

IEEE 802.1Q (VLANs)*

IEEE 802.1X (Security)

IEEE 802.3af (Power over Ethernet)

IEEE 802.3i (10BASE-T)

IEEE 802.3u (Fast Ethernet)

CERTIFICATIONS

Emissions and Safety:

VCCI Class A

FCC Part 15 Class A

ICES-003 Class A

CSA, C-Tick, NOM

Building:

NEMA-WD6, ANSI/TIA/EIA-568 and -569

PACKAGE CONTENTS

Switch NJ220, NJ100 single-pack: One switch with mounting screws, RJ-45 coupler cable, three adapter plates (Panduit, Avaya, blank), user guide; NJ220 includes quick start guide and CD-ROM with management utilities

Switch NJ240FX:

One switch with mounting screws, cable housing tray, wall-mount plate, power cord, quick start guide, user guide; CD-ROM with management utilities

Switch NJ220 20-pack:

20 switches with mounting screws, 20 RJ-45 coupler cables, 20 blank adapter plates, user guide, quick start guide and CD-ROM with management utilities

Avaya/Panduit adapter plates,

20-pack:

20 adapter plates with mounting screws

Hubbell/AMP/Ortronics adapter

plates, 20-pack:

20 snap-in adapter plates

PoE midspan solutions:

Midspan PSE, power cord

IntelliJack Switch Power Supply:

AC power adapter, power cord

WARRANTY

Limited Lifetime Hardware Warranty (NJ220 and NJ100); One-year Limited Hardware Warranty (NJ240FX). Limited Software Warranty for ninety (90) days. See www.3com.com/warranty for details.

* NJ240FX and NJ220 models

ORDERING INFORMATION

PRODUCT DESCRIPTION

Switches

3Com IntelliJack Switch NJ220

(single-pack, black)

(single-pack, cream)

(20-pack, black)

(20-pack, cream)

3Com IntelliJack Switch NJ240FX with LC Connector

(20-pack, cream)

3Com IntelliJack Switch NJ240FX with SC Connector

(20-pack, cream)

3Com IntelliJack Switch NJ100

(single-pack, cream)

Switch Adapter Plates

AMP Adapter Plates

(20-pack, black)

(20-pack, cream)

Avaya Adapter Plates

(20-pack, black)

(20-pack, cream)

3COM SKU

3CNJ220-BLK

3CNJ220-CRM

3CNJ220-BLK-20

3CNJ220-CRM-20

3CRNJ240FXLCTAA-75

3CRNJ240FXSCTAA-75

3CRNJ240FXSTTAA-75

3CNJ100

3CNJ100

3CNJAPB-AM-20

3CNJAP-AM-20

3CNJAPB-AV-20

3CNJAP-AV-20

PRODUCT DESCRIPTION

Switch Adapter Plates, *continued*

Hubbell Adapter Plates

(20-pack, black)

(20-pack, cream)

Ortronics Adapter Plates

(20-pack, black)

(20-pack, cream)

Panduit Adapter Plates

(20-pack, black)

(20-pack, cream)

Power and Accessories

3Com Power over Ethernet Multiport Midspan Solution

(24 ports, 802.3af-compliant)

3Com Power over Ethernet Single-Port Midspan Solution (48 VDC)

3Com IntelliJack Switch AC Power Supply

3Com IntelliJack Switch Extension Ring

3COM SKU

3CNJAPB-HU-20

3CNJAP-HU-20

3CNJAPB-OR-20

3CNJAP-OR-20

3CNJAPB-PA-20

3CNJAP-PA-20

3CNJPSE24

3CNJPSE

3CNJPSSL

3CNJEXTRING

Visit www.3com.com for more information about 3Com secure converged network solutions.

3Com Corporation, Corporate Headquarters, 350 Campus Drive, Marlborough, MA 01752-3064
3Com is publicly traded on NASDAQ under the symbol COMS.

Copyright © 2006 3Com Corporation. All rights reserved. 3Com, the 3Com logo, and IntelliJack are registered trademarks of 3Com Corporation or one of its subsidiaries. All other company and product names may be trademarks of their respective companies. While every effort is made to ensure the information given is accurate, 3Com does not accept liability for any errors or mistakes which may arise. All specifications are subject to change without notice. 400717-010 04/06

