Transform a simple LAN connection into an intelligent, four-port, PoE-capable, in-the-wall Gigabit Ethernet switch

OVERVIEW

3Com® IntelliJack® Gigabit switches quickly convert a single-port LAN wall outlet into four switched Gigabit 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.

With its two built-in pass-through ports, IntelliJack Gigabit switches provide for high speed Ethernet, as well as legacy analog and digital voice connectivity. Each switch delivers traffic prioritization, PoE and power forwarding for converged applications and end-points, such as IP phones, cameras and wireless access points.

The 3Com IntelliJack Gigabit Switch comes in both web-managed and unmanaged versions:

> IntelliJack Gigabit Switch NJ2000—offers Web-based management, with switching and security enhancements; power can be provided by IEEE 802.3af or IEEE 802.3at, or an optional 48v local power supply.

> IntelliJack Gigabit Switch NJ1000—provides the same features as the NJ2000 model, but without the web management, VLAN and security enhancements.

3Com IntelliJack Gigabit Switch, showing 4 different sides

KEY BENEFITS

COST-SAVING INFRASTRUCTURE EXPANSION

With innovative 3Com IntelliJack Gigabit 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 cables.

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 Gigabit switches include inline IEEE 802.3af or 802.3at, or a local AC power adapter. Both local AC and 802.at provide power forwarding on up to 2 ports.

CONVERGED SECURE NETWORKING

IntelliJack Gigabit switches support a number of advanced capabilities for converged networks, including IEEE 802.1p to ensure the proper quality of service (QoS). To enhance service and security, the IntelliJack NJ2000 can also label voice traffic as high priority and route it through its own virtual LAN (VLAN). Security features for the NJ2000 include VLANs, IEEE 802.1X network login—helping to prevent network abuse and unauthorized access.

WEB-BASED MANAGEMENT

The IntelliJack Switch NJ2000 has a web-based user interface for configuring switching, VLAN, security and QoS features.

CABLING FAULT DIAGNOSIS

The IntelliJack Switch NJ2000 offers cabling fault diagnosis and cable length estimation, allowing quick problem determination and repair.

SEAMLESS INFRASTRUCTURE INTEGRATION

Gigabit IntelliJack switches fully comply with Ethernet, Fast Ethernet, Gigabit Ethernet, PoE and relevant building and telecommunications wiring specifications.

* Sold separately

FEATURE HIGHLIGHTS AND MODEL COMPARISON

Feature	IntelliJack Model	
	NJ2000	NJ1000
Quadruples LAN connections by providing four 10/100/1000 switched Ethernet ports	✓	✓
Provides two RJ-45 pass-through ports for legacy communications support	✓	✓
Designed for in-the-wall operation to accommodate virtually any location, reducing installation costs and potential disruption of services	✓	✓
Adds flexibility to existing cabling plants	✓	✓
Optimizes converged applications with network traffic prioritization	✓	✓
Multiple power options	✓	✓
Provides PoE to power devices such as IP phones, cameras and access points	✓	✓
Simple Web-based management	✓	
Supports IEEE 802.1X network authentication	✓	
Supports IEEE 802.1Q VLAN for improved security and segmentation	✓	
Supports IEEE 802.1ad for link aggregation	✓	
Cable diagnostics for fault finding	✓	
Works with standards-based SNMP network management applications, including 3Com Network Supervisor	✓	

UNDERSTANDING THE POWER OPTIONS

Power to the IntelliJack Gigabit Switch can be supplied through either PoE (IEEE 802.3at or 802.3af) applied to the uplink port or through the optional local external power supply. If power is supplied to the uplink port by 802.3at or by the external power supply, then ports 1 and 2 may act as PoE Power Source Equipment (PSE) and may also provide power to other devices plugged into those ports. If power is supplied by 802.3af, then ports 1 and 2 will not be able to supply PoE power. Refer to the below table for a summary.

Input Power	PoE Forwarding, Ports 1 and 2
IEEE 802.3at	Yes
Local external power	Yes
IEEE 802.3af	No

Power options and PoE Forwarding

SPECIFICATIONS

PORTS
4 10/100/1000 BASE-TX ports, RJ-45 connectors

1 10/100/1000BASE-TX port for uplink

2 RJ-45 pass-through ports for legacy analog and digital connectivity

SECURITY†
Network login with IEEE 802.1X user authentication

Multiple VLAN configurations

POWER OVER ETHERNET (POE)
IEEE 802.3af PoE forwarding‡ through ports #1 and #2

MANAGEMENT†
IEEE 802.1Q VLANs, IEEE 802.1p QoS, DHCP client, port-level control

Web-based version management

Compatible with SNMP v1 and v2

DIMENSIONS
Switch

Height: 13.0 cm (5.1 in)

Width: 8.0 cm (3.16 in)

Depth: 4.0 cm (1.6 in)

Desktop stand

Height: 5.8 cm (2.3 in)

Width: 7.3 cm (2.9 in)

Depth: 10.0 cm (3.93 in)

POWER OPTIONS
Any IEEE 802.3af- or 802.3at-compliant PoE source

3Com IntelliJack Switch Power Supply (3CNJ10000PSL) is required where LAN does not have Power over Ethernet

POWER INPUT
PoE 48 VDC

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

ENVIRONMENTAL REQUIREMENTS
Operating temperature: 0° to 40°C (32° to 112°F)

Storage temperature: -40° to 70°C (-40° to 158°F)

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

Humidity (storage): 5% to 90% non-condensing

IEEE STANDARDS SUPPORTED
IEEE 802.1p (CoS)

IEEE 802.1Q (VLANs)†

IEEE 802.1X (Authentication)†

IEEE 802.3ab (1000BASE-T)

IEEE 802.3ad (Link aggregation)†

IEEE 802.3af and 802.3at (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 NJ1000, NJ2000 single-pack

One IntelliJack Gigabit Switch

Mounting screws

One universal wall-mount

2 RJ-45 coupler cables

Quick Start Guide

Switch NJ1000, NJ2000 20-pack

20 IntelliJack Gigabit Switches

20 sets of mounting screws

20 universal wall-mounts

40 RJ-45 coupler cables

Quick Start Guide

WARRANTY AND OTHER SERVICES
Three Year Limited Hardware Warranty

Limited Software Warranty for 90 days

90 days of telephone technical support

Refer to www.3com.com/warranty for details.

---

† NJ2000 model

‡ requires use of 3Com Single-Port IEEE 802.3at Gigabit PoE Midspan Solution (3CNJ1000PSE), IntelliJack Gigabit Switch Power Supply (3CNJ1000PSL) or Baseline Switch 2226 Plus (3CBLSF26)

ORDERING INFORMATION

PRODUCT DESCRIPTION	3COM SKU
3Com IntelliJack Gigabit Switch NJ1000	
(single-pack)	3CNJ1000
(20-pack)	3CNJ1000-20
3Com IntelliJack Gigabit Switch NJ2000	
(single-pack)	3CNJ2000
(20-pack)	3CNJ2000-20

PRODUCT DESCRIPTION	3COM SKU
Power and Accessories	
3Com Single–Port 802.3at Gigabit PoE Midspan	3CNJ1000PSE
3Com NJ1000/NJ2000 Local AC to DC 48v Power Supply	3CNJ1000PSL
3Com Baseline Switch 2226 Plus	3CBLSF26
3Com NJ1000 / NJ2000 Desktop Stand	3CNJ1000STAND

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

401097-002 04/09

3com