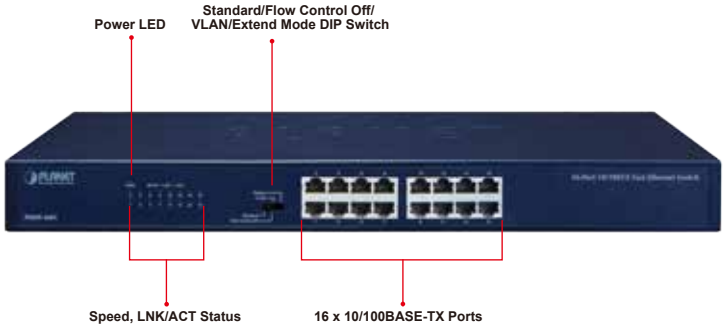
16-Port 10/100BASE-TX Fast Ethernet Switch

Power-saving, High-performance Ethernet Networking

PLANET **Green Networking Switch- FNSW-1601** is an ideal solution in line with the energy-saving trend worldwide. The FNSW-1601 is a 16-port 10/100BASE-TX Fast Ethernet Switch upgraded from earlier version and brings both benefits of energy saving and high performance.



Brand-New Hardware DIP Switch for Functional Operation Modes Selection

The new hardware version of the FNSW-1601 offers "**Standard**", "**Flow Control Off**", "**VLAN**" and "**Extend**" modes.

DIP Switch Mode	Function
Standard (default)	This mode makes the **Fast Ethernet Switch** operate as a general switch and all ports operate at 10/100Mbps auto-negotiation.
Flow Control Off	This mode disables the **Fast Ethernet Switch** flow control function.
VLAN	This mode makes the FNSW-1601 operate as a **VLAN isolation** switch and 1. Port 1 to port 14 will isolate respectively. 2. Port 1 to port 14 can only communicate with port 15 and port 16 (uplink port).
Extend	This mode makes the FNSW-1601 operate as a distance extension switch and port 1 to port 8 can only transmit distance of 200m at speed of 10Mbps.

Physical Port

- 16 10/100BASE-TX Fast Ethernet ports
- Supports auto MDI/MDI-X function

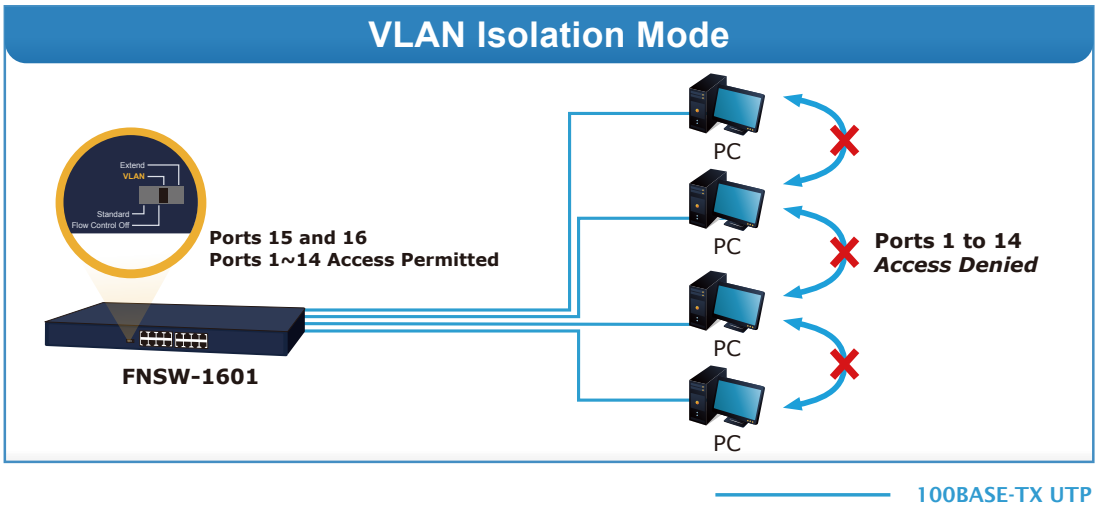
Layer 2 Features

- Complies with IEEE 802.3, 10BASE-T, IEEE 802.3u 100BASE-TX Ethernet standards
- Features Store-and-Forward mode with wire-speed filtering and forwarding rates
- Integrated address look-up engine, supporting 8K absolute MAC addresses
- Power saving ability for Green networking
- IEEE 802.1Q VLAN packet transparency support
- IEEE 802.3x flow control for full-duplex operation and back pressure for half-duplex operation
- Hardware-based 10/100BASE-TX, half/full duplex, flow control and auto-negotiation
- Automatic address learning and address aging
- Supports CSMA/CD protocol

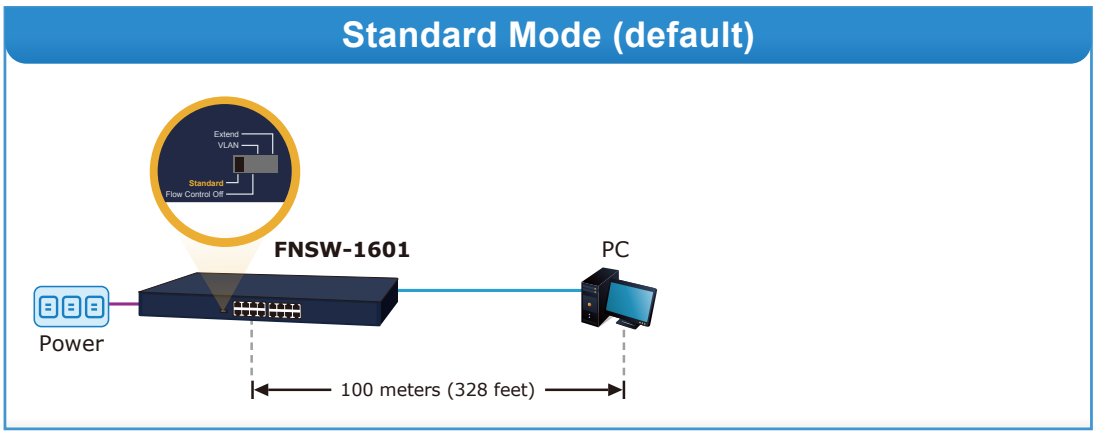
Hardware Features

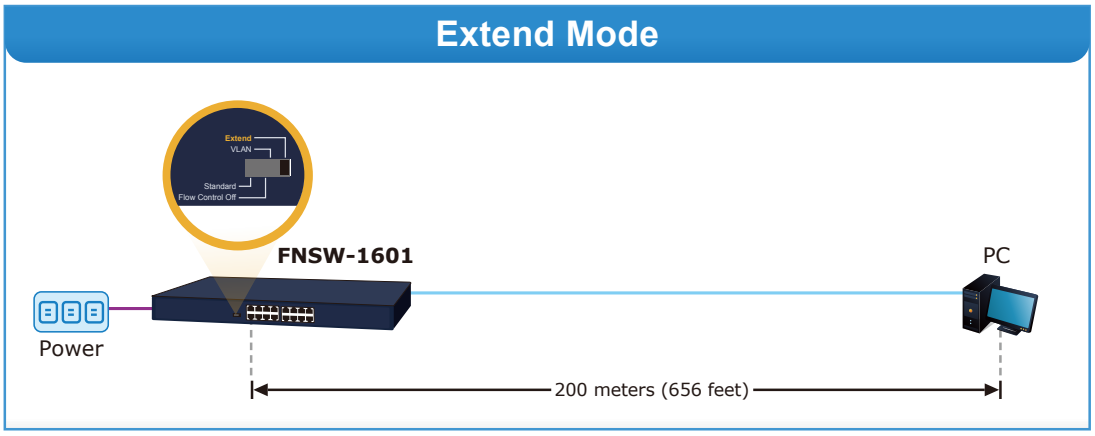
- 100~240V AC, 0.2A, 50~60Hz universal power input
- DIP switch for standard/flow control off/VLAN/Extend mode selection
- FCC, CE class A compliant

The FNSW-1601 operates as a normal Fast Ethernet Switch in the "**Standard**" operation mode. The "**VLAN**" operation mode features port-based VLAN function that can help to prevent the connected clients' multicast or broadcast storm from influencing each other.



In the "**Extend**" operation mode, the FNSW-1601 operates on a per-port basis at 10Mbps duplex operation but can transmit data over a distance of up to 200 meters overcoming the 100m limit on Ethernet UTP cable. With this brand-new feature, the FNSW-1601 provides an additional solution for distance extension, thus saving the cost of Ethernet cable installation. Its VLAN isolation function isolates each port so as to prevent broadcast storm and defend DHCP spoofing in the "Extend" operation mode.



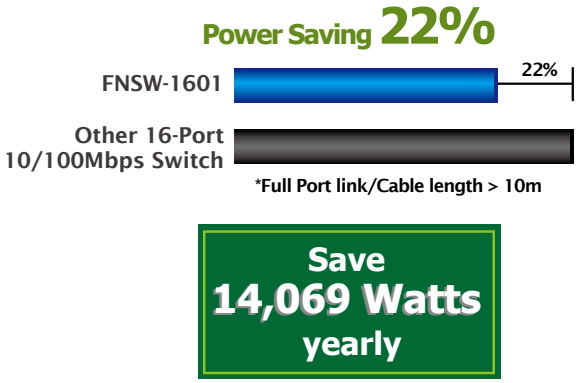


Energy Saving

The FNSW-1601 incorporates advanced Green Networking technology:

• **Intelligent scales power based on cable length**

The **intelligent scales power** is an intelligent algorithm that actively determines the appropriate power level based on cable length. The FNSW-1601 would automatically detect the Ethernet cable length and adjust power usage accordingly. The connected device can substantially reduce overall power consumption, which makes a significant contribution to energy saving. The FNSW-1601 uses new engine that provides power savings of up to 22% but maintains high performance efficiently.



High Performance

The high performance throughput (filtering / forwarding rate: 14,880 packets per second at 10Mbps, 148,800pps and 100Mbps) helps the FNSW-1601 boost bandwidth, eliminates unnecessary traffic, and relieves congestion on your critical server path. The FNSW-1601 is the ideal choice to alleviate bottlenecks in client / server and peer-to-peer environments in a cost-effective way.

Plug and Play

The FNSW-1601 provides users with high-speed network connections. With its auto-negotiation capability, all the RJ45/STP ports of the FNSW-1601 can be configured to speeds of 10/20Mbps or 100/200Mbps automatically. What's more, the MDI/ MDIX auto-detection is for easy, plug and play connection, regardless of the cabling type, straight-through or crossover.

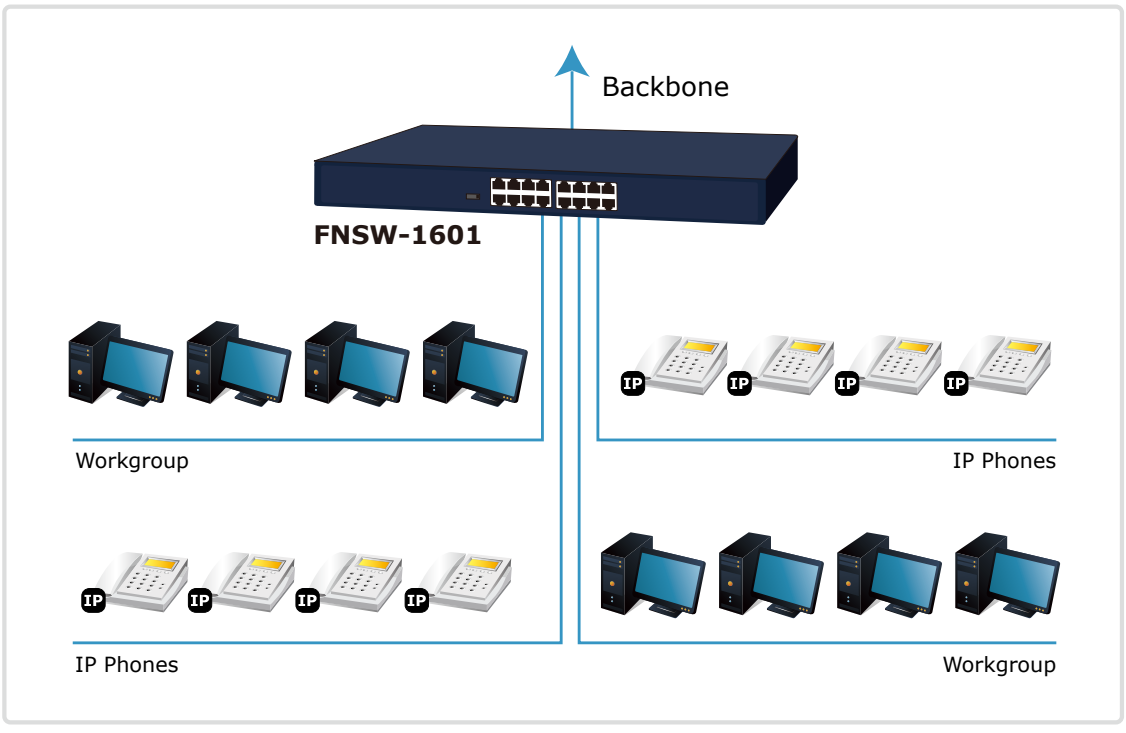
Applications

Backbone Switch

With up to 3.2Gbps switching fabric, the FNSW-1601 can provide high bandwidth connectivity to Fast Ethernet network backbone or can be the backbone of your workgroup.

Department Switch

Uplink directly by any straight or crossover cable to the backbone switch, the FNSW-1601 provides the connectivity to back plane yet segment the network traffic of the department to your backbone.



Specifications

Product	FNSW-1601
Hardware Specifications	
Hardware Version	V9
10/100BASE-TX MDI/MDIX Ports	16
Throughput (packet per second)	2.38Mpps
Switch Fabric	3.2Gbps
Weight	1.3kg
Power Consumption/Dissipation	1.3 watts / 4.4BTU
Power Requirements	100~240V AC, 0.2A, 50-60Hz
Dimensions (W x D x H)	440 x 140 x 44mm, 1U height
Switch Processing Scheme	Store-and-Forward
Address Table	8K entries
Maximum Packet Size	1522bytes
Flow Control	Back pressure for half duplex IEEE 802.3x pause frame for full duplex
DIP Switch	Operation mode selection ■ Standard ■ Flow control off ■ VLAN ■ Extend
Standards Conformance	
Regulatory Compliance	FCC Part 15 Class A, CE
Standards Compliance	IEEE 802.3 (Ethernet) IEEE 802.3u (Fast Ethernet) IEEE 802.3x (Full-Duplex Flow Control) IEEE 802.3az Energy Efficient Ethernet (EEE)
Standards Compliance	
Temperature	Operating: 0~50 degrees C Storage: -10~70 degrees C
Humidity	Operating: 5% to 95% (non-condensing) Storage: 5% to 95% (non-condensing)

Ordering Information

FNSW-1601	16-Port 10/100BASE-TX Fast Ethernet Switch

Related Products

FNSW-2401	24-Port 10/100BASE-TX Fast Ethernet Switch

PLANET Technology Corporation

11F., No.96, Minquan Rd., Xindian Dist., New Taipei City 231, Taiwan (R.O.C.)
Tel: 886-2-2219-9518 Fax: 886-2-2219-9528
Email: sales@planet.com.tw www.planet.com.tw