

Product Specification

5-Port 10/100Mbps Desktop Fast Ethernet Switch

SW-504

Version 4.0

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Change History:

Revision:	Date:	Author:	Change List
Version 3.0	2012/1/13	Bryant Wu	Initial Release
Version 4.0	2014/5/16	Marc Liao	Initial Release Chipset replacement from IC Plus IP175C to Realtek RTL8305NB.

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1. PRODUCT DESCRIPTION



High-speed 10/100Mbps Workgroup Switch

PLANET Fast Ethernet Switch SW-504 provides business and home users with a cost-effective integrated system of small-office / home-office networking. It is with compact-sized plastic case design and just right for the network of 10 to 50 users.

Stable Fast Ethernet Switch Performance

The SW-504 also supports Store-and-Forward forwarding scheme to ensure low latency and high data integrity. The high performance throughput (filtering / forwarding rate: 14,880 packets per second in 10Mbps, and 148,800 packets per second in 100Mbps) and built-in packet buffer help the SW-504 to boost bandwidth, eliminate unnecessary traffic, and relieve congestion on your critical server path. With an intelligent address recognition algorithm, the SW-504 could recognize up to a 2K different MAC addresses and provide 1Gbps switching capacity, which makes the SW-504 the best in wire-speed packet transfer performance without risk of packet loss.

Flexible Desktop Size Design

The SW-504 is a fancy-shaped plastic model that nicely fits in a space-limited environment. With concepts of **"easy to install and use"**, **"compact sized design"**, and **"simple troubleshooting"**, the SW-504 provides cost-conscious business and home users with a flexible yet cost-effective SOHO / Home networking.

Plug & Play and Easy Installation

All RJ-45 copper interfaces in the SW-504 support 10/100Mbps auto-negotiation for optimal speed detection through RJ-45 Category 5/5e cables. Supporting standard for auto-MDI/MDI-X can detect the type of connection to any Ethernet device without requiring special straight-through or crossover cables. The Flow Control function allows the SW-504 to support routers and servers for direct connection to this switch with fast and reliable data transfer.

2. PRODUCT FEATURES

RJ-45 Interface

- Five 10/100Mbps Fast Ethernet ports
- Complies with IEEE 802.3, 10Base-T, IEEE 802.3u 100Base-TX Ethernet standards
- Supports auto MDI/MDI-X function

Switching

- Hardware-based 10/100Mbps, half / full duplex, flow control and auto-negotiation
- Features Store-and-Forward mode with wire-speed filtering and forwarding rates
- IEEE 802.3x flow control for full duplex operation and back pressure for half duplex operation
- Integrated address look-up engine, supporting 2K absolute MAC addresses
- Handles up to 1536bytes packet
- Automatic address learning and address aging
- Supports CSMA/CD protocol

Hardware

- Made from plastic, desktop size and wall-mount design
- LED indicators for system power, per port Link / Act
- 5V DC, 1A external power adapter
- FCC, CE Class B compliant

3. PRODUCT SPECIFICATION

3.1 MAIN COMPONENT

Switch ASIC: Realtek RTL8305NB x1

3.2 FUNCTION SPECIFICATION

Product	SW-504
Hardware Specifications	
Hardware Version	4
10/100Base-TX Ports	5 auto MDI/MDIX ports
LED Display	One for Power, One for Link / Act per port
Enclosure	Plastic
Switch Specifications	
Switch Processing Scheme	Store-and-Forward
Address Table	2K
Share Data Buffer	Built-in
Flow Control	Back pressure half duplex, IEEE 802.3x pause frame full duplex
Switch Fabric	1Gbps
Throughput (packet per second)	0.744Mpps
Maximum Packet Size	1536bytes
Standards Conformance	
Standards Compliance	IEEE 802.3 (Ethernet) IEEE 802.3u (Fast Ethernet) IEEE 802.3x (Full-duplex Flow Control)

3.3 PHYSICAL SPECIFICATIONS:

Dimensions :

168 x 100 x 29 mm (W x D x H)

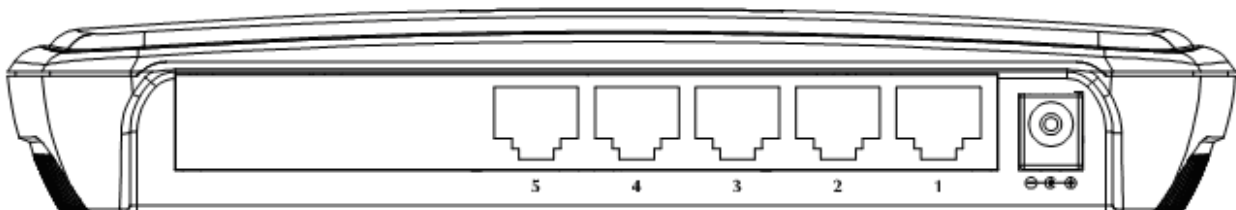
Weight:

130g

Front Panel:



Rear Panel:



LED Definition

System

LED	Color	Function
PWR	Green	Lights to indicate that the Switch has power. Lights off to indicate that the Switch has no power.

Per 10/100Mbps port

LED	Color	Function
LNK/ACT	Green	Lights to indicate the link through that port is successfully established at 10/100Mbps. Blink: indicate that the Switch is actively sending or receiving data over that port.

3.4 ENVIRONMENTAL SPECIFICATION

Operating:

- Temperature: 0°C ~ 50 degrees C
- Relative Humidity: 5% ~ 95% (non-condensing)

Storage:

- Temperature: -10°C ~ 70 degrees C
- Relative Humidity: 5% ~ 95% (non-condensing)

3.5 ELECTRICAL SPECIFICATION

Input Voltage:

External Power Adapter: DC 5V / 1A

Power consumption:

- System on without any devices attached

Input Voltage	110V / 60Hz	220V / 50Hz
Amp	0.009	0.007
Watt	0.5W	0.8W
BTU	1.7BTU	2.7BTU

- System on and with Full Load

Input Voltage	110V / 60Hz	220V / 50Hz
Amp	0.012	0.008
Watt	0.6W	1.0W
BTU	2.0BTU	3.4BTU

- System on and with Full Load Operating

Input Voltage	110V / 60Hz	220V / 50Hz
Amp	0.025	0.017
Watt	1.3W	1.8W
BTU	4.4BTU	6.1BTU

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3.6 REGULATORY COMPLIANCE

FCC Part 15 Class B, CE.

3.7 REALIABILITY

MTBF > 50,000 hrs @ 25 degrees C

3.8 BASIC PACKAGING

- SW-504 x1
- User's Manual x1
- 5V DC, 1A Power Adapter x 1

3.9 PACKING DIMENSION

Dimension: 192mm x 142mm x 85mm (W x D x H)

Weight: TBD

Unit per carton: 15pcs in one carton