

# 8-Port 10/100Mbps + 2-Port Gigabit TP/SFP Combo Managed Switch



## *Cost-effective Desktop Size / Fiber Capability / Group Managed Switch*

The PLANET WGSD-1022C is a desktop size Layer 2 Managed Fast Ethernet Switch. It provides 8 10/100Mbps Fast Ethernet ports and 2 Gigabit TP/SFP interfaces. The compact-size design Switch not only fits into space-limited environment but also is mountable in a 19-inch rack with attached rack-mounting kits. The equipped Gigabit SFP slot makes the WGSD-1022C with capability of fiber link for distance extending and can handle extremely large amounts of data in a secured topology which is linked to a backbone or high capacity servers.

The various supports of QoS mode and VLAN features make the WGSD-1022C meet the needs of SOHOs, SMBs and enterprises in effective data traffic control such as VoIP, video streaming and multicast applications. The key features are shown as below:

- IP Stacking up to 8 units
- 802.1Q VLAN
- Rapid Spanning Tree
- SNMP / SNMP Trap
- IGMP Snooping
- SFP slots, Fiber link capability

### *Enhanced Layer 2 Features*

The WGSD-1022C can be programmed for enhanced switch management functions, such as per port speed configuration, Port Trunking, VLAN, Rapid Spanning Tree, QoS, bandwidth control and IGMP Snooping. The WGSD-1022C provides Port-based VLAN, 802.1Q Tagged VLAN and the VLAN groups allowed on the WGSD-1022C will be maximally up to 255. Via supporting port trunking, the WGSD-1022C offers the operation of a high-speed trunk combining multiple ports. It also provides four groups of up to 8 ports for trunking and supports fail-over.

### *Efficient Management – Stacking Management*

For efficient management, the WGSD-1022C is equipped with console interface, Web interface and SNMP agent. With its built-in Web-based management, the WGSD-1022C offers an easy-to-use, platform-independent management and configuration facility. It supports standard Simple Network Management Protocol (SNMP) and can be managed via any standard-based management software. For text-based management, the WGSD-1022C can also be accessed via Telnet and the console port.

One of the management features of WGSD-1022C is the IP Stacking function support. It helps network managers to easily configure up to 8 switches in the same series via one single one IP address instead of connecting and setting each unit one by one.

## KEY FEATURES

### *PHYSICAL PORT*

- 8-Port 10/100Base-TX RJ-45
- 2-Port Gigabit TP/SFP combo interface

### *LAYER 2 FEATURES*

- Complies with the IEEE 802.3, IEEE 802.3u, IEEE 802.3ab, IEEE 802.3z Gigabit Ethernet standard
- Auto-negotiation and half duplex/full duplex modes for all 10Base-T/100Base-TX and 1000Base-T ports.
- High performance of Store-and-Forward architecture, broadcast storm control and runt/CRC filtering eliminate erroneous packets to optimize the network bandwidth

- IEEE 802.1Q Tagged based VLAN and Port-based VLAN
- Up to 4 Trunk groups, each trunk can be up to maximum 8 port with 1.6Gbps bandwidth(Full Duplex Mode)
- IEEE 802.1d, IEEE 802.1w, classic Spanning Tree Algorithm or Rapid Spanning Tree support

#### QUALITY OF SERVICE

- 4 priority queues on all switch ports.
- Strict priority and Weighted Round Robin (WRR) CoS policies
- QoS and bandwidth control on each port

#### MULTICAST

- IGMP Snooping v1 and v2
- IGMP Port and Group policy

#### SECURITY

- IEEE 802.1x Port-based Authentication, RADIUS server authentication
- MAC address Filtering and MAC address Binding
- Port Mirroring to monitor the incoming or outgoing traffic on a particular port

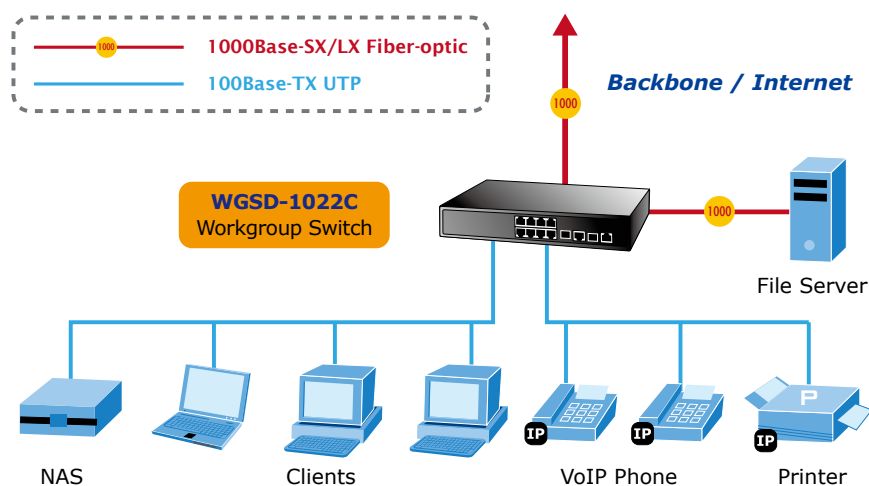
#### MANAGEMENT

- WEB-based, Telnet, Console Command Line management
- Access through SNMP v1 and v2c set and get requests.
- Four groups (history, statistics, alarms, and events) of embedded remote monitoring (RMON) agents for network monitoring and traffic analysis
- EMI standards comply with FCC, CE class A

## APPLICATIONS

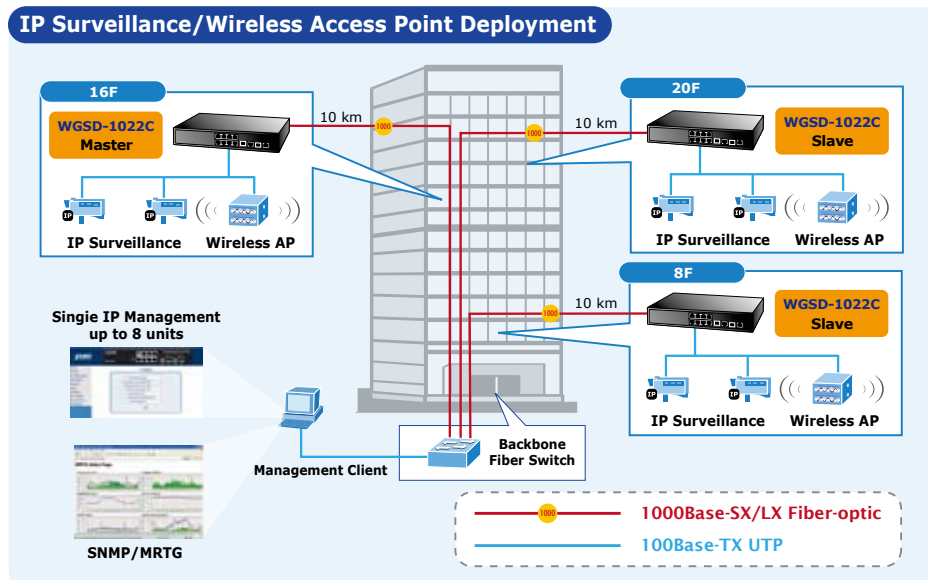
### Workgroup Switch

With 8 10/100Mbps copper ports and 2 Gigabit-Ethernet fiber ports, the WGSD-1022C provides a cost-effective and high-performance solution for power users.



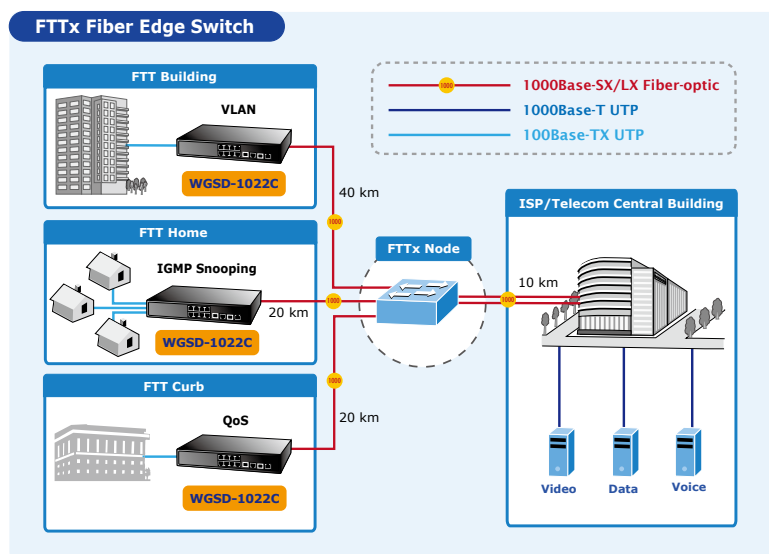
**Department Switch**

With non-blocking switch fabric 5.6 Gigabits per second, the WGSD-1022C can easily provide a local and high bandwidth and Fast Ethernet network for backbone of departments. With the SFP port, the WGSD-1022C provides the uplink to the backbone network through Gigabit Ethernet LX/SX SFP mini-GBIC modules. The high backplane simplifies the tasks of upgrading the LAN for catering the increasing bandwidth demands.



**FTTx Edge Switch**

With the mini-GBIC 1000Base-SX/LX SFP (Small Factor Pluggable) interface, the deploy distance of WGSD-1022C, a high-performance edge device for FTTx solutions, can be extended from 550 meters (Multi-mode fiber) up to above 10/20/30/40/50/70/120 kilometers (Single-mode fiber). To build a network solution of FTTH (Fiber to the Home), FTTC (Fiber to the Curb) for ISPs or FTTB (Fiber to the Building) for enterprises, the various distances of SFP (Small-Form Factor Pluggable) and Bidi (WDM) transceivers are optional for customers. For security applications, the 8 copper ports can be configured with VLAN settings and connect to different units like offices, houses and departments.



**SPECIFICATION**

<b>Product</b>	<b>8-Port 10/100Mbps + 2-Port Gigabit TP/SFP Managed Ethernet Switch</b>
<b>Model</b>	<b>WGSD-1022C</b>
<b>Hardware Specification</b>	
<b>Copper Ports</b>	8 10/ 100Base-TX RJ-45 Auto-MDI/MDI-X ports 2 10/100/1000Base-T RJ-45 port
<b>SFP/mini-GBIC Slots</b>	2 SFP interface, shared with Port-9, Port-10
<b>Switch Architecture</b>	Store-and-Forward
<b>Switch Fabric</b>	5.6Gbps / non-blocking
<b>Switch Throughput</b>	4.16 Mpps
<b>Address Table</b>	8K entries
<b>Share Data Buffer</b>	1 Mbits
<b>Flow Control</b>	Back pressure for half duplex, IEEE 802.3x Pause Frame for full duplex
<b>LED</b>	Power, Link/Act and speed per port
<b>Console Interface</b>	One RS-232 DB-9 male connector for switch management
<b>Dimension (W x D x H)</b>	280 x 173 x 44 mm, 1U height
<b>Power requirement</b>	110~240V AC, 50/60Hz
<b>Power Consumption</b>	12.2 watts / 41BTU
<b>Weight</b>	1.24 kg
<b>Layer 2 function</b>	
<b>Management Interface</b>	Console, Telnet, Web Browser, SNMP v1 and v2c
<b>Port Configuration</b>	Port disable / enable Auto-negotiation 10/100Mbps full and half duplex mode selection Flow Control disable / enable. Bandwidth control on each port
<b>Port Status</b>	Display each port speed duplex mode, link status, Flow control status. Auto-negotiation status
<b>VLAN</b>	Port-based VLAN, up to 49 VLAN groups IEEE 802.1Q Tagged Based VLAN , 4K VLAN ID, up to 255 VLAN groups
<b>Spanning Tree</b>	IEEE 802.1d, IEEE 802.1w
<b>Link Aggregation</b>	Supports 4 groups of 8-Port trunk
<b>QoS</b>	4 priority queues Traffic classification based on Port Number, 802.1p priority, DS/TOS field in IP Packet
<b>IGMP Snooping</b>	v1 and v2 IGMP Port / Group Policy and Static Routing Port setting
<b>Bandwidth Control</b>	Per port bandwidth control Ingress: 500Kb~80Mbps Egress: 64Kb~80Mbps
<b>Port Mirror</b>	Both
<b>Security</b>	MAC filtering and Binding, up to 400 rules RFC-1213 MIB-II
<b>SNMP MIBs</b>	RFC-2863 Interface MIB RFC-1493 Bridge MIB RFC-2674 Extended Bridge MIB (Q-Bridge) RFC-2819 RMON MIB (Group 1, 2, 3 and 9)
<b>Standards Conformance</b>	
<b>Regulation Compliance</b>	FCC Part 15 Class A, CE
<b>Standards Compliance</b>	IEEE 802.3 10Base-T IEEE 802.3u 100Base-TX/100Base-FX IEEE 802.3z Gigabit SX/LX IEEE 802.3ab Gigabit 1000Base-T IEEE 802.3x Flow Control and Back pressure IEEE 802.1d Spanning tree protocol IEEE 802.1w Rapid spanning tree protocol IEEE 802.1p Class of service IEEE 802.1Q VLAN Tagging IEEE 802.1x Port Authentication Network Control
<b>Network Media</b>	10Base-T – UTP/STP category 3, 4 or 5 cable 100Base-TX – UTP/STP category 5 cable 1000Base-T – UTP/STP category 5e/6 cable 1000Base-SX - ◆ 62.5/125µm multi-mode fiber optic cable, up to 220m ◆ 50/125µm multi-mode fiber optic cable, up to 550m 1000Base-LX ◆ 9/125µm single-mode fiber optic cable, up to 120km

**Environment Specifications**

<b>Operating</b>	Temperature: 0 ~ 50 Degree C Relative Humidity: 20 ~ 90% (non-condensing)
<b>Storage</b>	Temperature: -40 ~ 70 Degree C Relative Humidity: 20 ~ 90% (non-condensing)

**ORDERING INFORMATION**

<b>WGSD-1022C</b>	8-Port 10/100Mbps + 2 Gigabit TP/SFP Combo Managed Switch
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**AVAILABLE MODULES FOR WGSD-1022C**

<b>MGB-GT</b>	SFP-Port 1000Base-T Module
<b>MGB-SX</b>	SFP-Port 1000Base-SX mini-GBIC module
<b>MGB-LX</b>	SFP-Port 1000Base-LX mini-GBIC module
<b>MGB-L30</b>	SFP-Port 1000Base-LX mini-GBIC module-30km
<b>MGB-L50</b>	SFP-Port 1000Base-LX mini-GBIC module-50km
<b>MGB-L70</b>	SFP-Port 1000Base-LX mini-GBIC module-70km
<b>MGB-L120</b>	SFP-Port 1000Base-LX mini-GBIC module-120km
<b>MGB-LA10</b>	SFP-Port 1000Base-LX (WDM,TX:1310nm) mini-GBIC module-10km
<b>MGB-LB10</b>	SFP-Port 1000Base-LX (WDM,TX:1550nm) mini-GBIC module-10km
<b>MGB-LA20</b>	SFP-Port 1000Base-LX (WDM,TX:1310nm) mini-GBIC module-20km
<b>MGB-LB20</b>	SFP-Port 1000Base-LX (WDM,TX:1550nm) mini-GBIC module-20km
<b>MGB-LA40</b>	SFP-Port 1000Base-LX (WDM,TX:1310nm) mini-GBIC module-40km
<b>MGB-LB40</b>	SFP-Port 1000Base-LX (WDM,TX:1550nm) mini-GBIC module-40km

**RELATIVE PRODUCTS**

<b>WSD-800</b>	8-Port 10/100Mbps Managed Switch
<b>WGSD-910</b>	8-Port 10/100Mbps + 1 Gigabit TP/SFP Combo Managed Switch
<b>WSW-2401A</b>	24-Port 10/100Mbps + 1 Open Slot Managed Switch
<b>WGSW-2840</b>	24-Port 10/100Mbps + 4-Port Gigabit TP/SFP Combo Managed Switch
<b>WGSW-5240</b>	48-Port 10/100Mbps + 4-Port Gigabit TP/SFP Combo Managed Switch