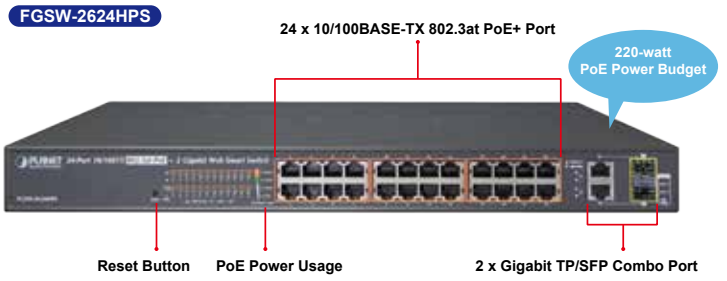
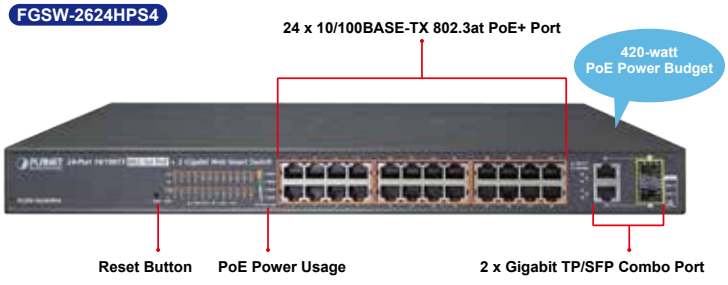
24-Port 10/100TX 802.3at PoE + 2-Port Gigabit TP/SFP Combo Web Smart Ethernet Switch

Cost-effective PoE+ Managed Switch for Small and Medium Networking

Particularly designed for the growing popular IP surveillance applications, PLANET FGSW-2624HPS / FGSW-2624HPS4 802.3at PoE web smart switch is a surveillance switch with the central management of remote power control and IP camera monitoring. The FGSW-2624HPS / FGSW-2624HPS4 provides PoE functions along with 24 10/100BASE-TX ports featuring 30-watt 802.3at PoE+ with RJ45 copper interfaces and 2 Gigabit TP/SFP combo interfaces supporting high-speed transmission of surveillance images and videos. With a total power budget of up to 220 watts and 420 watts for different kinds of PoE applications, respectively, the FGSW-2624HPS and FGSW-2624HPS4 provide a quick, safe and cost-effective Power over Ethernet network solution for small businesses and enterprises.





Physical Port

- 24-port 10/100BASE-TX RJ45 copper with 24-port IEEE 802.3at/af PoE injector
- 2-port 10/100/1000BASE-T Gigabit RJ45 copper
- 2 1000BASE-X mini-GBIC/SFP slots, shared with port-25 to port-26
- Reset button for system management

Power over Ethernet

- Complies with IEEE 802.3at High Power over Ethernet End-span PSE
- Complies with IEEE 802.3af Power over Ethernet End-span PSE
- Up to 24 IEEE 802.3at / 802.3af devices powered
- Supports PoE Power up to 30.8 watts for each PoE port
- Detects powered device (PD) automatically
- Circuit protection prevents power interference between ports
- Remote power feeding up to 100m
- PoE Power Usage
- PoE Management
  - Per port PoE function enable/disable
  - PoE Port Power feeding priority
  - Per PoE port power limit
  - PD classification detection
  - PoE power sequential

Layer 2 Features

- Auto-MDI/MDI-X detection on each RJ45 port
- Prevents packet loss with back pressure (half-duplex) and IEEE 802.3x pause frame flow control (full-duplex)
- Supports broadcast storm control
- Supports VLAN
  - IEEE 802.1Q tag-based VLAN, up to 32 VLANs groups, out of 4095 VLAN IDs
  - Port-based VLAN, up to 26 VLAN groups
  - MTU VLAN (Multi-tenant Unit VLAN)
- Supports Link Aggregation
  - 802.3ad Link Aggregation Control Protocol (LACP)

Centralized Power Management for Security and Public Service PoE Applications

To fulfill the needs of the high power consumption of PoE network applications, the FGSW-2624HPS / FGSW-2624HPS4 features the standard IEEE 802.3at Power over Ethernet Plus (PoE+) that combines up to 30 watts of power output and data per port over one cat5E/6 Ethernet cable. It is designed specifically to meet the demand of the high power consumption of network PDs (powered devices) such as IR, PTZ, speed dome cameras; and even box-type IP cameras with built-in fan and heater. Compliant with both 802.3at and 802.3af standards, the series allows more flexibility in power requirement for a variety of PDs, making installation costs affordable.

Number of Powered Devices / Applications	Model & PoE Budget	FGSW-2624HPS	FGSW-2624HPS4
		220 watts	420 watts
PoE Ability (100 meters)	*Class 2 PD @ 7 watts* — PoE Mini Dome, PoE VoIP Phone	24	24
	Class 3 PD @ 15 watts — PoE Box IP Camera, PoE Wireless AP	14	24
	Class 4 PD @ 30 watts — PoE+ Speed Dome	7	14

Intelligent LED Indicator for Real-time PoE Usage

The FGSW-2624HPS / FGSW-2624HPS4 helps users to monitor the current status of PoE power usage easily and efficiently with its advanced LED indication. Called “PoE Power Usage” found on the front panel of the FGSW-2624HPS / FGSW-2624HPS4 Fast Ethernet PoE+ Switch, it has four orange LEDs indicating the range of the current PoE power usage.

Robust Layer 2 Features

The FGSW-2624HPS / FGSW-2624HPS4 can be programmed for advanced switch management functions such as dynamic port link aggregation (LACP), Spanning Tree Protocol (STP), IGMP Snooping v1, v2, bandwidth control and L2/L4 security control. The FGSW-2624HPS / FGSW-2624HPS4 provides IEEE 802.1Q tagged VLAN, port-based VLAN and MTU VLAN. The VLAN groups allowed will be maximally up to 32. Via aggregation of supporting ports, the FGSW-2624HPS / FGSW-2624HPS4 allows the operation of a high-speed trunk combining multiple ports and supports fail-over as well.

  - Cisco ether-channel (static trunk)
- Supports Spanning Tree Protocol
  - STP, IEEE 802.1d Spanning Tree Protocol
  - RSTP, IEEE 802.1w Rapid Spanning Tree Protocol
- Port mirroring to monitor the incoming or outgoing traffic on a particular port
- Provides port mirror (Many-to-1)

Quality of Service

- 2 priority queues on all switch ports
- Traffic classification
  - Port-based priority
  - IEEE 802.1p-based priority
  - IP TOS / DSCP-based priority
  - TCP / UDP port-based QoS
- Strict priority and Weighted Round Robin (WRR) CoS policies

Multicast

- Supports IGMP Snooping v1 and v2 (excluding IGMP Query feature)

Security

- Physical port to MAC address binding
- TCP/UDP port number filter: Forwarding or discarding typical network applications
- Port mirroring to monitor the incoming or outgoing traffic on a particular port

Management

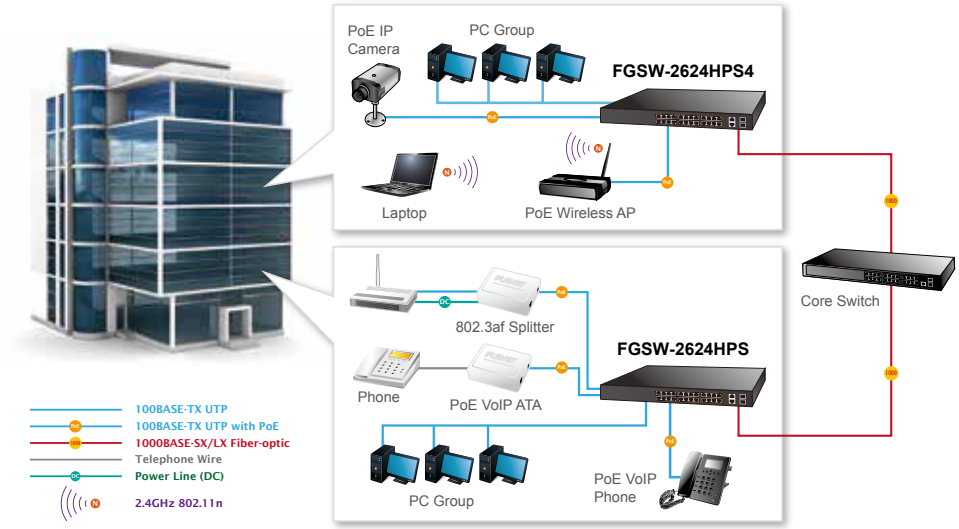
- Switch Management Interfaces
  - Web switch management
  - SNMP v1 switch management
- Firmware upload/download via HTTP
- Hardware reset button for system reboot or resetting to factory default

Remote and Centralized Management

For catering to the need of easy management and centralized SNMP application to monitor the status of the switch and traffic per port, the FGSW-2624HPS / FGSW-2624HPS4 provides friendly Web management interface for efficient network operation. With its built-in Web-based management, the FGSW-2624HPS / FGSW-2624HPS4 offers an easy-to-use, platform-independent management and configuration facility. It also supports standard Simple Network Management Protocol (SNMP) and can be monitored via any standard-based management software.

Flexible and Extendable Uplink Solution

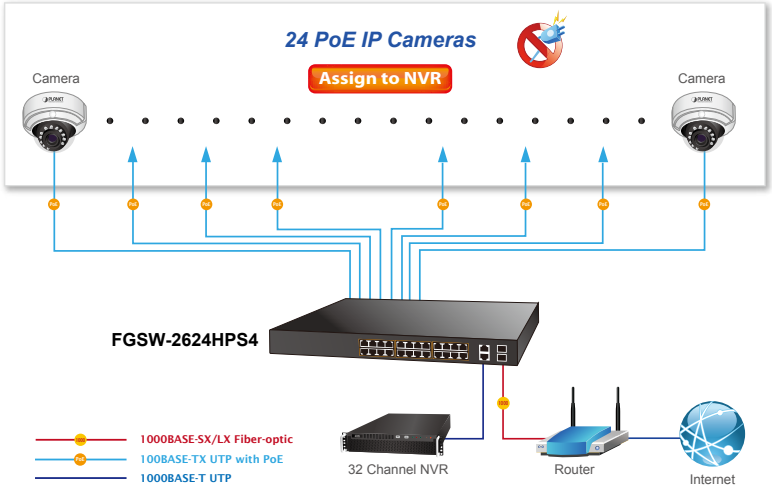
The FGSW-2624HPS / FGSW-2624HPS4 provides 2 extra Gigabit TP/SFP combo interfaces supporting 10/100/1000BASE-T RJ45 copper to connect with surveillance network devices such as NVR, Video Streaming Server or NAS to facilitate surveillance management. Or through these fiber SFP slots, it can also connect with the 1000BASE-SX/LX SFP (Small Form-factor Pluggable) fiber transceiver to uplink to backbone switch and monitoring center in long distance. The distance can be extended from 550m to 2km (multi-mode fiber), even going up to 10/20/30/40/50/70/120km (single-mode fiber or WDM fiber). They are well suited for applications within the enterprise data centers and distributions.



Applications

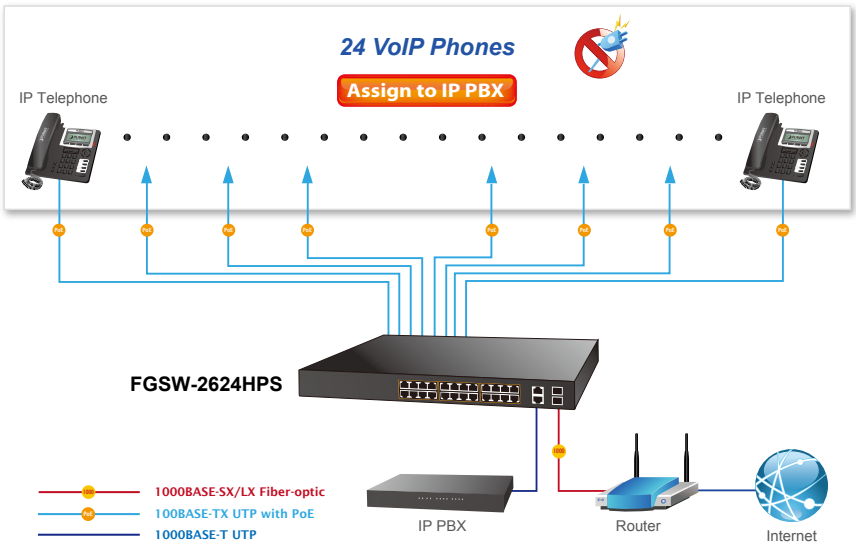
PoE IP Surveillance with Extended Network Infrastructure for SMBs / Workgroups

Providing 24 10/100BASE-TX PoE+ ports, in-line power interfaces and two Gigabit TP/SFP Combo interfaces, the FGSW-2624HPS4 can easily build an IP camera system for the enterprises where its power is centrally controlled. It can work with one 32-channel NVR to perform comprehensive security monitoring with 24 IP cameras via one Gigabit TP/SFP Combo port. The FGSW-2624HPS4 comes with non-blocking design, desktop size and SFP fiber-optic modules, bringing flexibility to building a network infrastructure at a low cost.



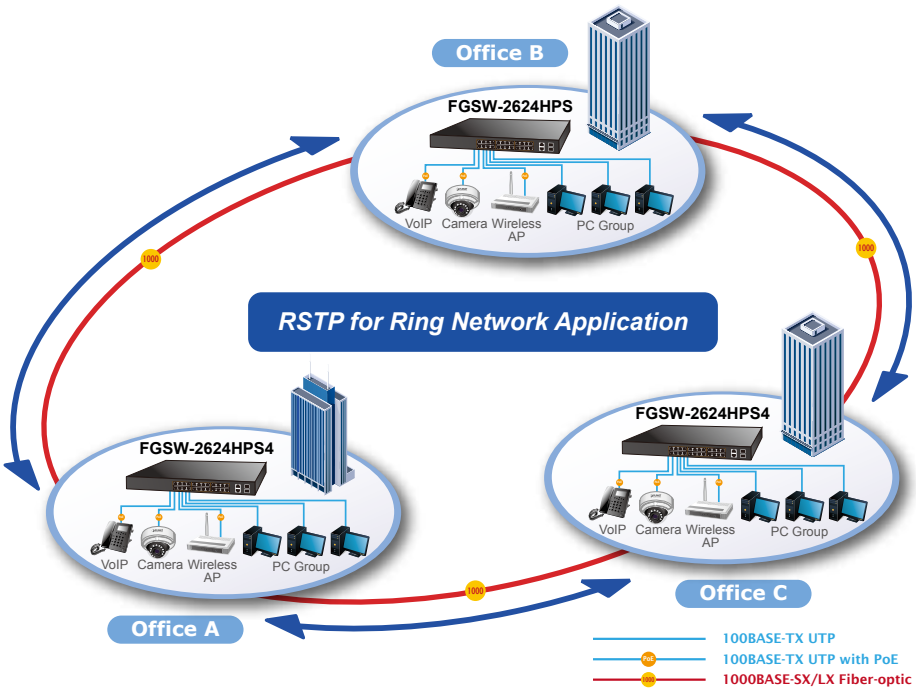
Extended Network Infrastructure for SMBs / Workgroups with PoE IP Phone

Providing 24 10/100BASE-TX PoE+ ports, in-line power interfaces and two Gigabit TP/SFP Combo interfaces, the FGSW-2624HPS can easily build a VoIP system for the enterprises where its power is centrally controlled. It can work with one IP PBX to perform comprehensive security communicating with 24 VoIP phones via one Gigabit TP/SFP Combo port.



Rapid Spanning Tree Protocol for Efficient Network System

The FGSW-2624HPS / FGSW-2624HPS4 features strong rapid self-recovery capability to prevent interruptions and external intrusions. It incorporates Rapid Spanning Tree Protocol (802.1w RSTP) into customer's automation network to enhance system reliability and uptime.



Specifications

Model		FGSW-2624HPS	FGSW-2624HPS4
Hardware Specifications			
10/100Mbps Copper Ports		24 10/100BASE-TX RJ45 auto-MDI/MDI-X ports	
Gigabit Copper Ports		2 10/100/1000BASE-T RJ45 auto-MDI/MDI-X ports	
SFP/mini-GBIC Slots		2 1000BASE-X SFP interfaces, shared with Port-25 to Port-26	
Switch Architecture		Store-and-Forward	
Switch Fabric		8.8Gbps / non-blocking	
Throughput		6.54Mpps@64Bytes	
Address Table		4K entries, automatic source address learning and ageing	
Shared Data Buffer		2.75Mb embedded memory for packet buffers	
Flow Control		IEEE 802.3x pause frame for full-duplex Back pressure for half-duplex	
Maximum Transmit Unit		1518 Bytes	
Reset Button		< 5 sec: System reboot > 5 sec: Factory default	
Dimensions (W x D x H)		440 x 300 x 44.5 mm, 1U height	
Weight		4142g	4566g
Power Consumption		Max. 297 watts / 1013.4 BTU	Max. 513 watts / 1750.4 BTU
ESD Protection		Contact Discharge 4KV DC Air Discharge 8KV DC	
LED		**FGSW-2624HPS:** System: Power (Green) 10/100BASE-TX RJ45 Interfaces (Port 1 to Port 24): 10/100Mbps LNK/ACT (Green) PoE-in-Use (Orange) 10/100/1000BASE-T RJ45 / SFP Interfaces (Port 25 to Port 26): LNK/ACT (Green) 100/1000 (Green) PoE Usage 50W, 100W, 150W, 190W (Orange) **FGSW-2624HPS4:** System: Power (Green) 10/100BASE-TX RJ45 Interfaces (Port 1 to Port 24): 10/100Mbps LNK/ACT (Green) PoE-in-Use (Orange) 10/100/1000BASE-T RJ45 / SFP Interfaces (Port 25 to Port 26): LNK/ACT (Green) 100/1000 (Green) PoE Usage 100W, 200W, 300W, 400W (Orange)	
Cable	Twisted-pair	10BASE-T: 2-pair UTP Cat 3, 4, 5 for up to 100 meters 100BASE-TX: 2-pair UTP Cat 5, 5e for up to 100 meters 1000BASE-T: 4-pair UTP Cat 5e, 6 for up to 100 meters	
	Fiber-optic Cable	**1000BASE-SX :** 50/125μm or 62.5/125μm multi-mode fiber-optic cable, up to 550m (varying on SFP module) **1000BASE-LX :** 9/125μm single-mode fiber optic cable, up to 10/20/30/40/50/70/120 kilometers (varying on SFP module)	
Power over Ethernet			
PoE Standard		IEEE 802.3af / 802.3at PoE / PSE	
PoE Power Supply Type		End-span	
Power Pin Assignment		1/2(+), 3/6(-)	
PoE Power Output		Per Port 52V DC, Max. 30.8 watts	Per Port 54V DC, Max. 30.8 watts
PoE Power Budget		220 watts (max.) @ 25 degrees C 190 watts (max.) @ 50 degrees C	420 watts (max.) @ 25 degrees C 420 watts (max.) @ 50 degrees C
PoE Ability	PD @ 7 watts	24 units	24 units
	PD @ 15.4 watts	14 units	24 units
	PD @ 30 watts	7 units	14 units
Layer 2 Functions			
Port Configuration		Port disable / enable Auto-negotiation 10/100/1000Mbps full and half duplex mode selection Flow Control disable / enable	
Port Status		Display each port's speed duplex mode, link status, flow control status, auto negotiation status and trunk status	
Port Mirroring		TX / RX / Both Many-to-1 monitor	
VLAN		802.1Q tagged-based VLAN, up to 32 VLAN groups, out of 4094 VLAN IDs Port-based VLAN, up to 26 VLAN groups MTU VLAN	

Link Aggregation	1 group of 2-Port 10/100/1000BASE-T trunk supported
QoS	Allows to assign low / high priority on each port First-In-First-Out, All-High-before-Low, Weight-Round-Robin QoS policy
IGMP Snooping	IGMP (v1 / v2) Snooping, up to 32 multicast groups Without Query supported
Security Control	MAC address binding TCP & UDP filter
Management Functions	
Basic Management Interfaces	Web browser, SNMP v1
Standards Conformance	
Regulation Compliance	FCC Part 15 Class A, CE
Standards Compliance	IEEE 802.3 Ethernet IEEE 802.3u Fast Ethernet IEEE 802.3ab Gigabit Ethernet IEEE 802.3z Gigabit Ethernet over Fiber-Optic IEEE 802.3x Full-duplex flow control IEEE 802.1Q VLAN IEEE 802.1p QoS IEEE 802.1D Spanning Tree Protocol IEEE 802.1w Rapid Spanning Tree Protocol IEEE 802.3af Power over Ethernet IEEE 802.3at Power over Ethernet Plus
Environment	
Operating	Temperature: 0 ~ 50 degrees C Relative Humidity: 5 ~ 95% (non-condensing)
Storage	Temperature: -10 ~ 70 degrees C Relative Humidity: 5 ~ 95% (non-condensing)

Ordering Information

FGSW-2624HPS	24-Port 10/100TX 802.3at PoE + 2-Port Gigabit TP/SFP Combo Web Smart Ethernet Switch / 220W PoE budget
FGSW-2624HPS4	24-Port 10/100TX 802.3at PoE + 2-Port Gigabit TP/SFP Combo Web Smart Ethernet Switch / 420W PoE budget

Related PoE Products

ICA-2250VT	Industrial PoE Plus Outdoor IR IP Camera
ICA-3250V	Full HD Outdoor IR PoE IP Camera
ICA-3260	60fps Full HD IR Bullet IP Camera
ICA-3550V	5 Mega-pixel Outdoor IR PoE IP Camera
ICA-3350P	3 Mega-pixel Remote Focus Bullet IR IP Camera
ICA-4200V	Full HD 20M IR Vari-focal Dome IP Camera
ICA-4500V	5 Mega-pixel 20M IR Vari-focal Dome IP Camera
ICA-5250	Full HD Ultra-mini Vandal Dome
ICA-5250V	Full HD Vandalproof IR IP Camera
ICA-5260V	60fps Full HD Vandalproof IR IP Camera
ICA-5350V	3 Mega-pixel Vandalproof IR IP Camera
ICA-5550V	5 Mega-pixel Vandalproof IR IP Camera
ICA-HM620	2 Mega-pixel PoE Plus Speed Dome Internet Camera
POE-162S	IEEE 802.3at Gigabit High Power over Ethernet Splitter
POE-E201	IEEE 802.3at Power over Ethernet Extender
WNAP-W2200	802.11n 300Mbps In-Wall Access Point w/ USB Charger (EU Type)
WDAP-C7400	900Mbps Dual Band Ceiling-mount Wireless Access Point
WNAP-7350	5GHz 300Mbps 802.11a/n Outdoor Wireless Access Point
WNAP-6350	2.4GHz 300Mbps 802.11a/n Outdoor Wireless Access Point
VIP-256PT	802.3af PoE SIP IP Phone
VIP-2020PT	Enterprise HD PoE IP Phone (2-Line)
VIP-5060PT	Professional HD PoE IP Phone (6-Line)

SFP Gigabit Modules are available for the FGSW-2624HPS / FGSW-2624HPS4

Gigabit Ethernet Transceiver (1000BASE-X SFP)

Model	Speed (Mbps)	Connector Interface	Fiber Mode	Distance	Wavelength (nm)	Operating Temp.
MGB-GT	1000	Copper	--	100m	--	0 ~ 60°C
MGB-SX	1000	LC	Multi Mode	550m	850nm	0 ~ 60°C
MGB-SX2	1000	LC	Multi Mode	2km	1310nm	0 ~ 60°C
MGB-LX	1000	LC	Single Mode	10km	1310nm	0 ~ 60°C
MGB-L30	1000	LC	Single Mode	30km	1310nm	0 ~ 60°C
MGB-L50	1000	LC	Single Mode	50km	1550nm	0 ~ 60°C
MGB-L70	1000	LC	Single Mode	70km	1550nm	0 ~ 60°C
MGB-L120	1000	LC	Single Mode	120km	1550nm	0 ~ 60°C
MGB-TSX	1000	LC	Multi Mode	550m	850nm	-40 ~ 75°C
MGB-TLX	1000	LC	Single Mode	10km	1310nm	-40 ~ 75°C
MGB-TL30	1000	LC	Single Mode	30km	1310nm	-40 ~ 75°C
MGB-TL70	1000	LC	Single Mode	70km	1550nm	-40 ~ 75°C

Gigabit Ethernet Transceiver (1000BASE-BX, Single Fiber Bi-directional SFP)

Model	Speed (Mbps)	Connector Interface	Fiber Mode	Distance	Wavelength (TX)	Wavelength (RX)	Operating Temp.
MGB-LA10 MGB-LB10	1000	WDM(LC)	Single Mode	10km	1310nm	1550nm	0 ~ 60°C
	1000	WDM(LC)	Single Mode	10km	1550nm	1310nm	0 ~ 60°C
MGB-LA20 MGB-LB20	1000	WDM(LC)	Single Mode	20km	1310nm	1550nm	0 ~ 60°C
	1000	WDM(LC)	Single Mode	20km	1550nm	1310nm	0 ~ 60°C
MGB-LA40 MGB-LB40	1000	WDM(LC)	Single Mode	40km	1310nm	1550nm	0 ~ 60°C
	1000	WDM(LC)	Single Mode	40km	1550nm	1310nm	0 ~ 60°C
MGB-LA60 MGB-LB60	1000	WDM(LC)	Single Mode	60km	1310nm	1550nm	0 ~ 60°C
	1000	WDM(LC)	Single Mode	60km	1550nm	1310nm	0 ~ 60°C
MGB-TLA10 MGB-TLB10	1000	WDM(LC)	Single Mode	10km	1310nm	1550nm	-40 ~ 75°C
	1000	WDM(LC)	Single Mode	10km	1550nm	1310nm	-40 ~ 75°C
MGB-TLA20 MGB-TLB20	1000	WDM(LC)	Single Mode	20km	1310nm	1550nm	-40 ~ 75°C
	1000	WDM(LC)	Single Mode	20km	1550nm	1310nm	-40 ~ 75°C
MGB-TLA40 MGB-TLB40	1000	WDM(LC)	Single Mode	40km	1310nm	1550nm	-40 ~ 75°C
	1000	WDM(LC)	Single Mode	40km	1550nm	1310nm	-40 ~ 75°C
MGB-TLA60 MGB-TLB60	1000	WDM(LC)	Single Mode	60km	1310nm	1550nm	-40 ~ 75°C
	1000	WDM(LC)	Single Mode	60km	1550nm	1310nm	-40 ~ 75°C

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

PLANET reserves the right to change specifications without prior notice. All brand names and trademarks are property of their respective owners. Copyright © 2015 PLANET Technology Corp. All rights reserved.