

## 2-Port 10/100/1000T 802.3bt PoE + 4-Port 10/100/1000T 802.3at PoE + 2-Port 10/100/1000T + 2-Port 1000X SFP Desktop Switch (180 Watts)



### Flexible, Extendable and Centralized Power Distribution

PLANET GSD-1022UP is the unmanaged Gigabit PoE switch equipped with **two 802.3bt PoE++ ports**, **four 802.3at PoE+ ports**, **two extra Gigabit TP ports** and **two Gigabit SFP interfaces for uplink port**. With a total PoE power budget of 180 watts and non-blocking data switching performance, the GSD-1022UP can fulfill the demand of sufficient PoE power for Wi-Fi system in a small-scale but high-performance network.



### Ideal Solution for SOHO to Have IP Surveillance Secure

As IP surveillance is in great demand, the GSD-1022UP is also best used as a Surveillance Switch to supply PoE power to PoE IP cameras without requiring an extra cabling or electrical outlet, making the deployment of cameras quick and convenient. The GSD-1022UP supports two 802.3bt PoE++ ports and four 802.3at PoE+ ports along with 6 10/100/1000BASE-T ports featuring up to 95 or 32 watts, two extra Gigabit Ethernet TP interfaces and **two Gigabit SFP uplink ports** to ensure high-speed data and video transmission, reliable assurance for connection between the surveillance system and outside network where all the PoE ports can be used to their full potential.

### Plug and Play High Power Sourcing Solution

Complying with the IEEE 802.3bt PoE++ technology, the GSD-1022UP provides up to 95 watts of PoE output power, tripling that of the earlier 802.3at PoE+ technology. The GSD-1022UP also can be backward compatible with 802.3af/at PoE standards to allow users to flexibly deploy standard and high powered devices simultaneously with no need of software configuration. With data and Power over

### Physical Port

- 2-port 10/100/1000BASE-T Gigabit RJ45 copper with IEEE 802.3bt PoE++ injector function
- 4-port 10/100/1000BASE-T Gigabit RJ45 copper with IEEE 802.3at PoE+ injector function
- Two 10/100/1000BASE-T Gigabit RJ45 copper interfaces
- Two 1000BASE-X SFP interfaces

### Power over Ethernet

- Complies with IEEE 802.3af/at/bt Power over Ethernet end-span PSE
- 2 ports for IEEE 802.3bt PDs and 4 ports for IEEE 802.3af/at PDs
- Supports PoE power up to 95 watts for PoE ports 1 to 2, 32 watts for PoE ports 3 to 6
- Each port supports 56V DC power to PoE PD
- 180-watt PoE budget
- Auto detects powered device (PD)
- Circuit protection prevents power interference between ports
- Supports PoE in BT, Legacy and UPoE mode

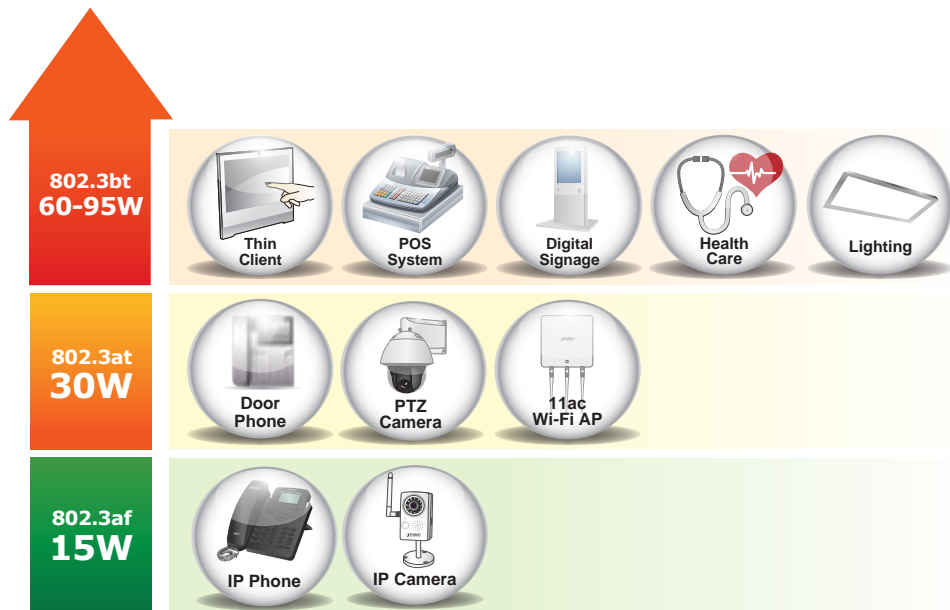
### Switching

- Hardware-based 10/100/1000Mbps auto-negotiation and auto MDI/MDI-X
- Flow control for full duplex operation and back pressure for half duplex operation
- Integrates address look-up engine, supporting 4K absolute MAC addresses
- Automatic address learning and address aging
- 9K jumbo frame supports all speeds (10/100/1000Mbps)

### Hardware

- 9-inch desktop size, 1U height, rack mountable, wall-mountable
- LED indicators for PoE ready/activity and LINK/ACT
- 1 silent fan to provide stable and efficient power performance
- Supports Energy-Efficient Ethernet (EEE) function (IEEE 802.3az)

Ethernet from one unit, the GSD-1022UP can reduce cable deployment and eliminate the need for dedicated electrical outlets on the wall, ceiling or any unreachable place.



#### 802.3bt PoE++ and DIP Switch for PoE Power Output Mode Options

To meet the demand of various powered devices consuming stable PoE power, the GSD-1022UP provide one DIP switch for multi-PoE operation modes that include 95-watts UPOE, BT and Legacy mode to solve the incompatibility of non-standard 4-pair PoE PDs in the field.

- 802.3bt PoE++ Power Output Mode
- UPOE Power Output Mode
- Legacy Power Output Mode

PoE Mode	Function
BT	This mode fully supports IEEE 802.3af/at/bt standards.
UPOE	This mode fully supports Cisco UPoE standards or PoH standards.
Legacy	The legacy detection is to identify the valid current signature of the PDs that do not fully follow the IEEE 802.3af/at/bt standard. This protects against damage to the PDs as the right PoE mode is applied.

#### Flexible Extension Solution

The GSD-1022UP provides 2 extra 10/100/1000BASE-T RJ45 copper for surveillance network devices such as NVR, video streaming server or NAS to facilitate surveillance management. Or through these Gigabit speed fiber SFP slots, the 1000BASE-SX/LX SFP (Small Form-factor Pluggable) fiber transceiver is inserted to be uplinked to a backbone switch and monitoring center over a long distance. The distance can be extended from 550m to 2km (multi-mode fiber), even going up to above 10/20/30/40/50/60/70/120km (single-mode fiber or WDM fiber). They are well suited for applications within the enterprise data centers and distributions.

#### Environment-friendly, Robust Protection

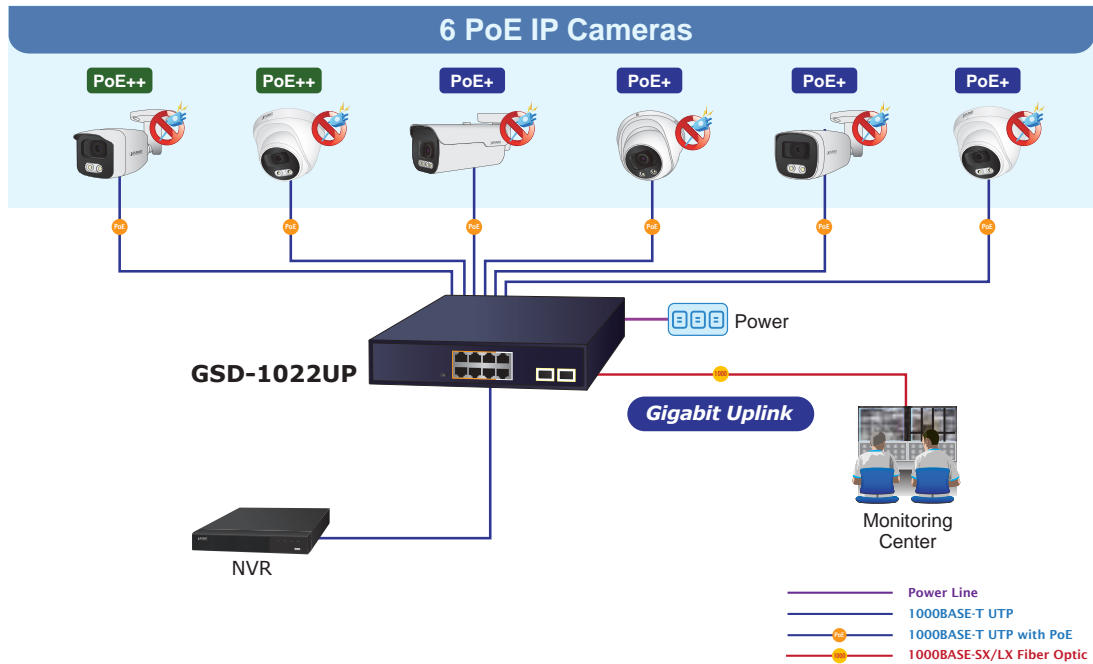
The GSD-1022UP comes with a desktop-sized, compact metal housing, making the placement of the unit convenient. Moreover, the GSD-1022UP is able to operate reliably and stably in any environment without affecting its performance. The deployment of PoE PDs with constant power feeding can be easily and quickly done.

The GSD-1022UP protects against the ESD **6KV** surge to improve product stability and also protects users' networks from devastating ESD attacks, making sure the flow of operation does not fluctuate.

## Applications

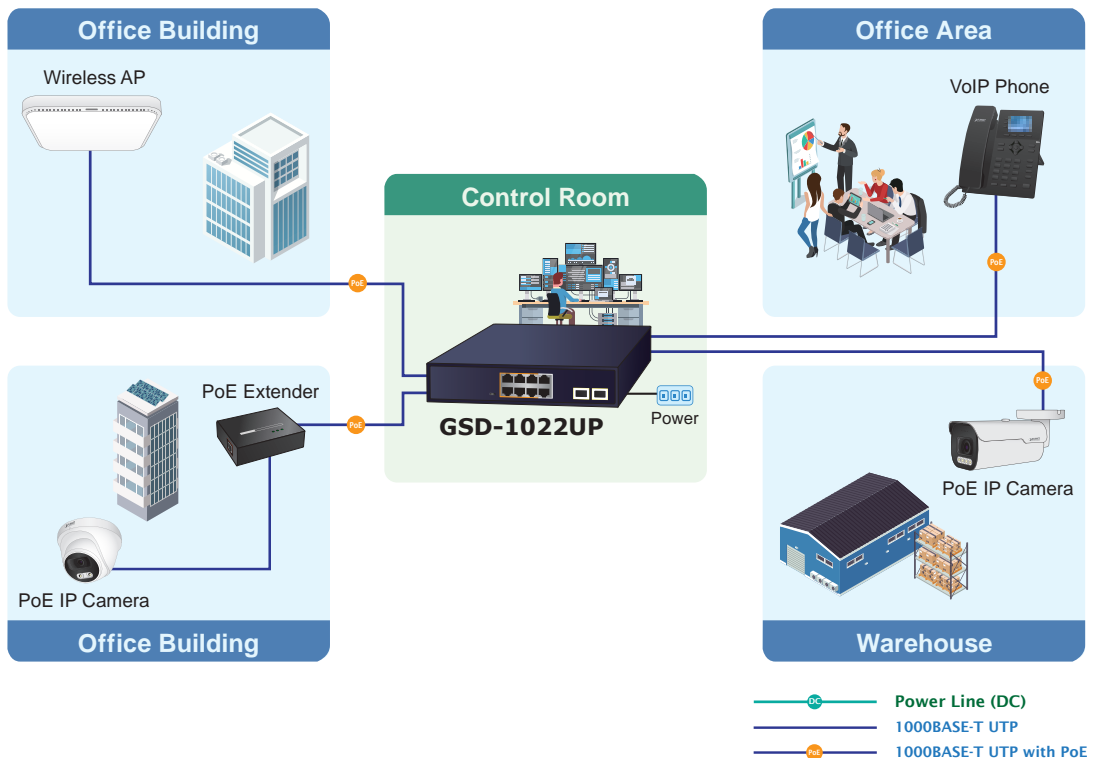
### Perfectly-integrated Solution for PoE IP Camera and NVR System

The GSD-1022UP provides **two 802.3bt PoE++ ports, four 802.3at PoE+ ports, two extra Gigabit TP ports and two Gigabit SFP interfaces for uplink port** for catering to small-scale home and SOHO IP surveillance networks at a lower total cost. The GSD-1022UP comes with a high-performance switch architecture and **180-watt PoE power budget**. The recorded video files from all the PoE IP cameras powered by the GSD-1022UP are saved to the NVR system.



### IP Office Department/Workgroup PoE Switch

To further expand the office premises, the additional telephones required could be installed at less cost via the PoE IP telephony system, better than the traditional circuit wiring telephony system. The GSD-1022UP PoE++ Switch helps enterprises to create an integrated data, voice, and powered network. The IEEE 802.3af/at compliant IP phones can be installed without the need of an additional power cable because the power can be provided via the standard Ethernet cable from the connected GSD-1022UP. With the GSD-1022UP, IP telephony deployment becomes more reliable and cost effective, thus helping enterprises save tremendous cost when upgrading from the traditional telephony system to IP telephony communications infrastructure.



## Specifications

Model	GSD-1022UP
<b>Hardware Specifications</b>	
Copper Port	8 10/100/1000BASE-T RJ45 auto MDI/MDIX ports
Fiber Port	2 1000BASE-X SFP slots
PoE Inject Port	2 ports with 802.3bt PoE++ injector function (Ports 1 to 2) 4 ports with 802.3af/at PoE+ injector function (Ports 3 to 6)
DIP Switch	PoE power feeding options (Legacy/BT/UPOE) selection
Thermal Fan	1
Power Requirements	AC 100~240V, 50/60Hz, 2.5A max
Power Consumption	Max. 200 watts, 682.4 BTU
Dimensions (W x D x H)	220 x 150 x 44 mm
Weight	1322g
Surge Protection	Differential mode ±2KV Common mode ±4KV
ESD Protection	Contact: ±6KV; Air: ±8KV
Installation	Desktop, Wall-mount or Rack-mount installation
LED Indicators	<b>System:</b> <ul style="list-style-type: none"> <li>■ Power (Green)</li> </ul> <b>10/100/1000BASE-T RJ45 interfaces:</b> <ul style="list-style-type: none"> <li>■ 10/100/1000Mbps LNK/ACT (Green)</li> </ul> <b>1000BASE-X SFP interfaces:</b> <ul style="list-style-type: none"> <li>■ 1000Mbps LNK/ACT (Green)</li> </ul> <b>PoE interfaces:</b> <ul style="list-style-type: none"> <li>■ PoE-in-Use (Amber)</li> </ul>
<b>Switching</b>	
Switch Architecture	Store-and-Forward
MAC Address Table	4K MAC address table with auto learning function
Switch Fabric	20Gbps
Switch Throughput	13.39Mpps
Jumbo Packet	9K bytes
Flow Control	Back pressure for half duplex. IEEE 802.3x pause frame for full duplex
<b>Power over Ethernet</b>	
PoE Standard	IEEE 802.3af Power over Ethernet/PSE IEEE 802.3at Power over Ethernet Plus/PSE IEEE 802.3bt Power over Ethernet Plus Plus/PSE
PoE Power Supply Type	Ports 1 to 2: End-span + Mid-span; Ports 3 to 6: End-span
Power Pin Assignment	Ports 1 to 2: 4 pairs 1/2 (-), 3/6 (+) and 4/5 (+), 7/8 (-); Ports 3 to 6: 2 pairs 1/2 (-), 3/6 (+)
PoE Power Output	Ports 1 to 2: 95W max.; Ports 3 to 6: 32W max.
Total PoE Power Budget	180 watts
<b>Standard Conformance</b>	
EMI Safety	FCC Part 15 Class A, CE
Standard Compliance	IEEE 802.3 10BASE-T IEEE 802.3u 100BASE-TX IEEE 802.3ab 1000BASE-T Gigabit 1000BASE-T IEEE 802.3x Flow Control and Back Pressure IEEE 802.3af Power over Ethernet IEEE 802.3at Power over Ethernet Plus IEEE 802.3bt Power over Ethernet Plus Plus
EEE	IEEE 802.3az
<b>Standard Conformance</b>	
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

GSD-1022UP	2-Port 10/100/1000T 802.3bt PoE + 4-Port 10/100/1000T 802.3at PoE + 2-Port 10/100/1000T + 2-Port 1000X SFP Desktop Switch
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## Related Products

GSD-1008HP	8-Port 10/100/1000T 802.3at PoE + 2-Port 10/100/1000T Desktop Switch (120 watts)
GSD-2022P	16-Port 10/100/1000T 802.3at PoE + 2-Port 10/100/1000T + 2-Port 1000X SFP Desktop Switch
GSW-1820HP	16-Port 10/100/1000T 802.3at PoE + 2-Port 1000X SFP Gigabit Ethernet Switch
ICA-3480F	H.265+ 4MP Full Color Bullet IP Camera
ICA-4480F	H.265+ 4MP Full Color Dome IP Camera
ICA-M3580P	H.265 5 Mega-pixel Smart IR Bullet IP Camera with Remote Focus and Zoom
ICA-M4580P	H.265 5 Mega-pixel Smart IR Dome IP Camera with Remote Focus and Zoom
WDAP-W1800AXU	Dual Band 802.11ax 1800Mbps In-wall Wireless Access Point w/802.3at PoE+ and Type C USB
WDAP-C1800AX	Dual Band 802.11ax 1800Mbps Ceiling-mount Wireless Access Point w/802.3at PoE+ & 2 10/100/1000T LAN Ports