GSD-504UP

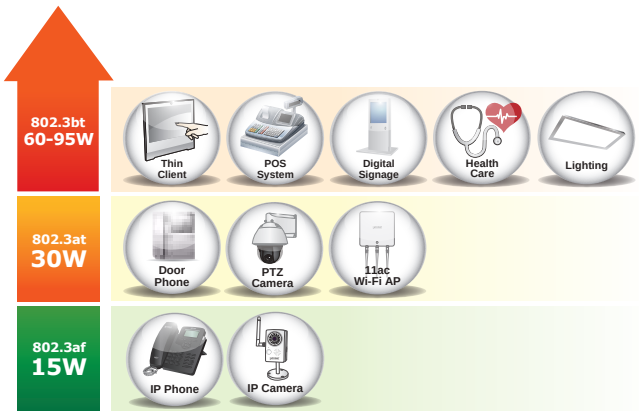
2-Port 10/100/1000T 802.3bt PoE + 2-Port 10/100/1000T 802.3at PoE + 1-Port Gigabit Desktop Switch (External 120 Watts)

The Smallest 802.3bt PoE++ Switch

PLANET GSD-504UP is the smallest unmanaged Gigabit PoE switch equipped with **two 802.3bt PoE++ ports**, **two 802.3at PoE+ ports** and one uplink port. With a total PoE power budget of 120 watts and non-blocking data switching performance, the GSD-504UP can fulfill the demand of sufficient PoE power for different applications.

Plug and Play High Power Sourcing Solution

Complying with the IEEE 802.3bt Power over Ethernet Plus Plus technology, the GSD-504UP provides up to **90 watts** of PoE output power, **tripling** that of the earlier 802.3at plus. With the **Legacy** function enabled via the DIP switch, it 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 Ethernet from one unit, the GSD-504UP can reduce cable deployment and eliminate the need for dedicated electrical outlets on the wall, ceiling or any unreachable place.



RJ45 Interface

- 5 10/100/1000BASE-T RJ45 ports

Power over Ethernet

- Complies with IEEE 802.3af/at/bt Power over Ethernet end-span PSE
- 2 ports for IEEE 802.3bt PDs and 2 ports for IEEE 802.3af/at PDs
- Supports PoE power up to 90 watts for PoE ports 1 to 2, 30 watts for PoE ports 3 to 4
- Each port supports 55V DC power to PoE PD
- 120-watt PoE budget
- Auto detects PD
- Circuit protection prevents power interference between ports
- Supports PoE in Standard and Legacy 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 2K absolute MAC addresses
- Automatic address learning and address aging

Hardware

- LED indicators for PoE ready/activity and LINK/ACT
- One 55V DC power jack
- Fanless design

Environment-friendly, Fanless Design for Silent Operation

The GSD-504UP comes with a desktop-sized, compact metal housing, making the placement of the unit convenient. It features a ventilated construction in which a cooling fan is not necessary, thereby making its operation noiseless. Moreover, the GSD-504UP 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.

Robust Protection

The GSD-504UP 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.

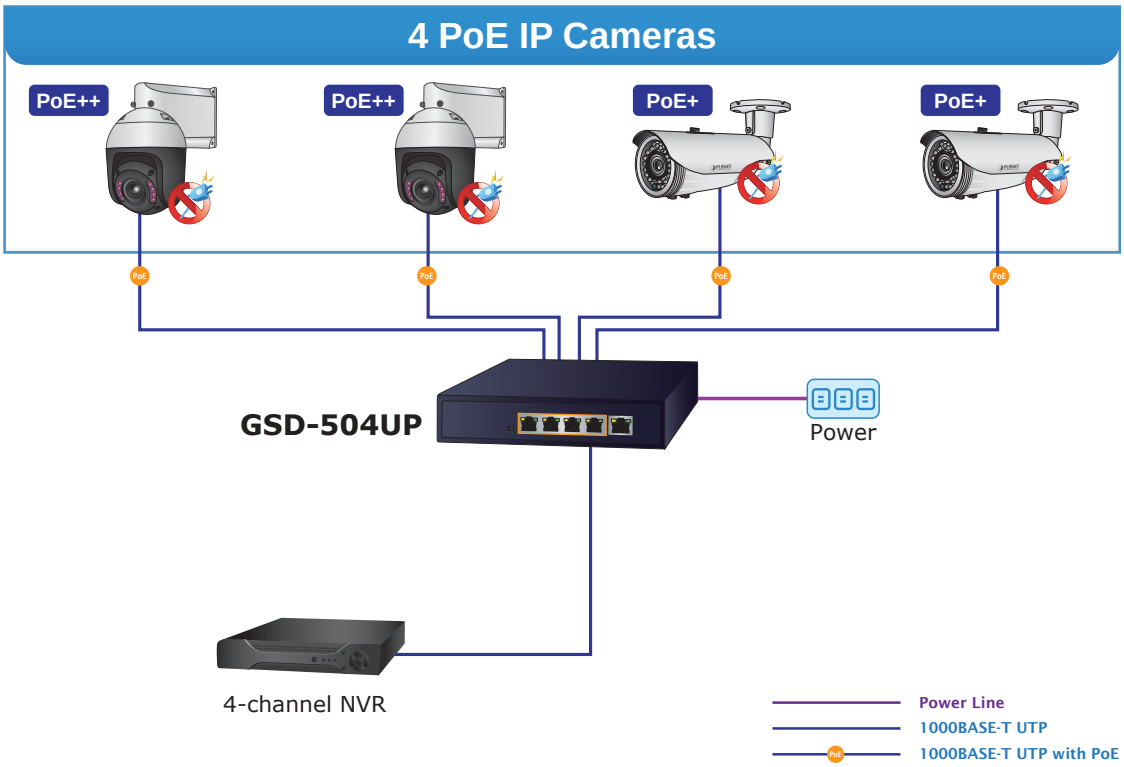
Ideal Solution for SOHO to Have IP Surveillance Secure

As IP surveillance is in great demand, the GSD-504UP PoE++ Switch 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-504UP supports two 802.3bt PoE ++ ports and two 802.3at PoE+ ports along with four 10/100/1000BASE-T ports featuring up to 90 or 30 watts, and one extra Gigabit Ethernet TP interface supporting high-speed transmission of surveillance images and videos.

Applications

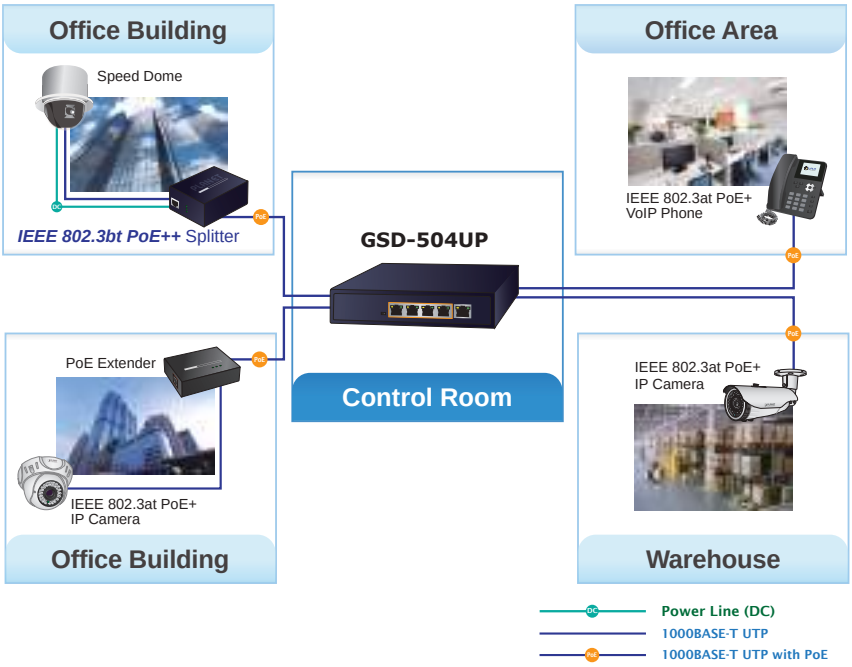
Perfectly-integrated Solution for PoE IP Camera and NVR System

The GSD-504UP provides four 802.3at/bt PoE ports for catering to small-scale home and SOHO IP surveillance networks at a lower total cost. The GSD-504UP comes with a high-performance switch architecture and **120-watt** PoE power budget. The recorded video files from the 4 PoE IP cameras powered by the GSD-504UP are saved to the 4-channel NVR system.

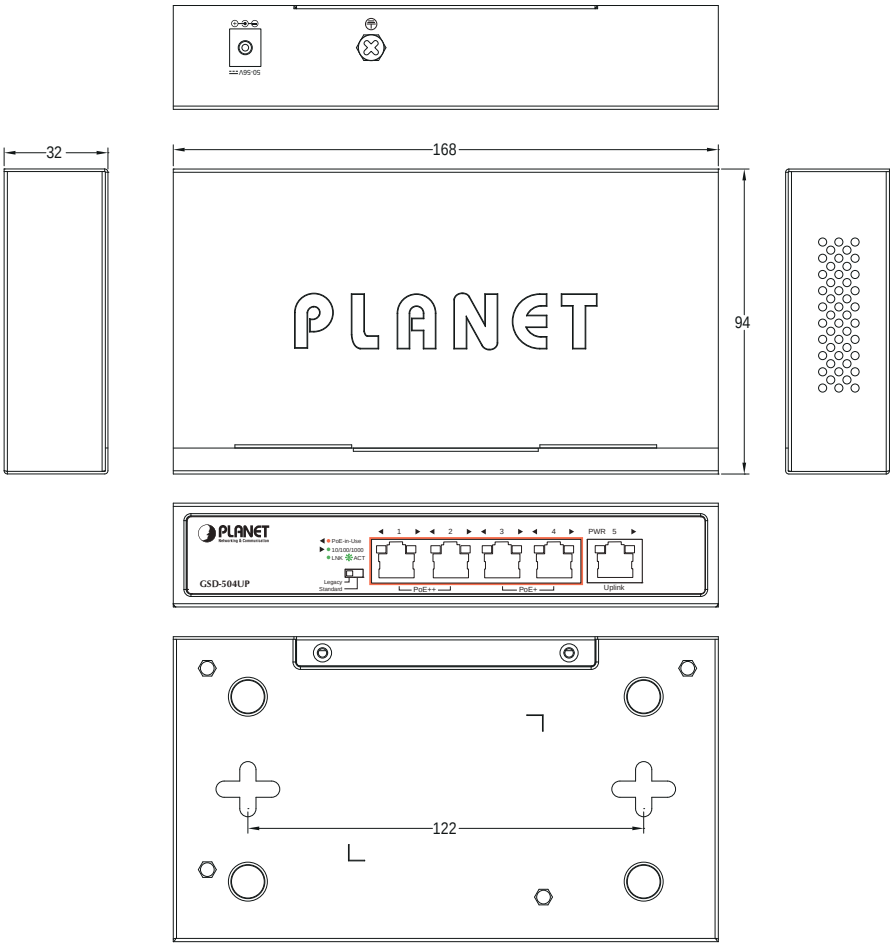


IP Office Department/Workgroup PoE Switch

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-504UP 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-504UP. With the GSD-504UP, 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.



Three-view Diagram



Product Specifications

Model	GSD-504UP
Hardware Specifications	
Network Connector	5 10/100/1000BASE-T RJ45 auto MDI/MDIX ports
PoE Inject Port	2 ports with 802.3bt PoE++ injector function (Ports 1 to 2) 2 ports with 802.3af/at PoE+ injector function (Ports 3 to 4)
LED Indicators	System: PWR (Orange) Per PoE port: PoE (Orange, Ports 1 to 4) Ethernet port: LNK (Green)
Thermal Fan	Fanless design
Switch Architecture	Store-and-Forward
MAC Address Table	2K MAC address table with auto learning function
Switch Fabric	10Gbps
Switch Throughput	7.44Mpps @64 bytes
Jumbo Packet	9K bytes
Flow Control	Back pressure for half duplex. IEEE 802.3x pause frame for full duplex
Power Requirements	55V DC, 2.8A
Surge Protection	Contact: 4KV; Air: 6KV
ESD Protection	Contact: 4KV; Air: 6KV
Power Consumption	Max. 136 watts, 464.05 BTU
Dimensions (W x D x H)	168 x 93 x 32 mm
Weight	414g
Power over Ethernet	
PoE Standard	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 4: End-span
Power Pin Assignment	Ports 1 to 2: 4 pairs 1/2 (-), 3/6 (+) and 4/5 (+), 7/8 (-); Ports 3 to 4: 2 pairs 1/2 (-), 3/6 (+)
PoE Power Output	Ports 1 to 2: 90W max.; Ports 3 to 4: 30W max.
Total PoE Power Budget	120 watts
Standard Conformance	
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
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

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Related Products

FGSW-2022VHP	12-Port 10/100TX 802.3at PoE + 4-Port 10/100TX 802.3bt PoE + 2-Port Gigabit TP + 2-Port SFP Ethernet Switch with LCD Management
POE-E304	1-Port 802.3bt PoE++ to 4-Port 802.3af/at Gigabit PoE Extender
POE-173S	Single-Port 10/100/1000Mbps 802.3bt PoE++ Splitter

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