

100/1000BASE-X SFP to 10/100/1000BASE-T 802.3bt PoE++ Media Converter



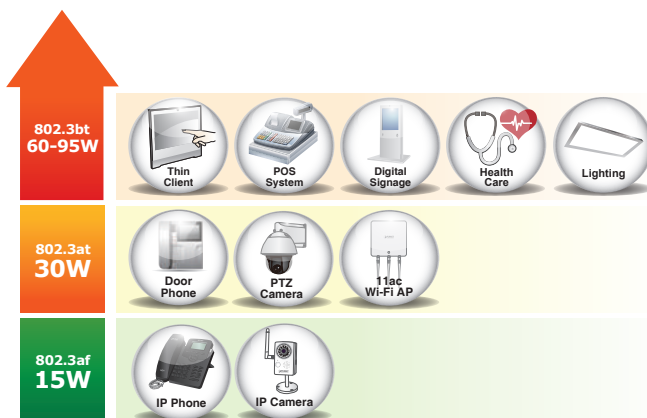
802.3bt PoE++ 60/95-watt Power over 4-pair UTP Solution

As the GUP-805A-60W and GUP-805A-95W adopt the IEEE 802.3bt PoE++ standard technology, they are capable to source up to **60 watts** and **95 watts** of power by using all the four pairs of standard Cat5e/6 Ethernet cabling to deliver power and full-speed data to each remote PoE compliant powered device (PD). Their power capability is three times more than that of the conventional 802.3at PoE+ and they are an ideal solution for those high power consuming network PDs, such as:

- PoE PTZ speed dome cameras
- Network devices
- Thin clients
- AIO (all-in-one) touch PCs, point of sale (POS) and information kiosks
- Remote digital signage displays
- PoE lightings

With a total power budget of up to **60 watts** and **95 watts** for different kinds of PoE applications, the GUP-805A-60W and GUP-805A-95W provide a quick, safe and higher 802.3bt PoE++ network solution for small businesses and enterprises.

Model	PoE Standard	PoE Budget	LAN Port Speed	SFP Slot Speed
GUP-805A-60W	IEEE 802.3af/at/bt	60 watts	10/100/1000Mbps	100/1000BASE-X
GUP-805A-95W	IEEE 802.3af/at/bt	95 watts	10/100/1000Mbps	100/1000BASE-X



Physical Port

- Media conversion between 10/100/1000BASE-T and 100BASE-FX/1000BASE-SX/LX
- Copper RJ45 interface with Data + Power output
- Copper port supports 10/100/1000BASE-T auto-negotiation and auto-MDI/MDI-X.
- Fiber media allows
 - Multi-mode fiber using LC connector
 - Single-mode fiber using LC connector

Power over Ethernet

- Compatible with IEEE 802.3bt Power over Ethernet plus end-span + mid-span PSE
- Backward Compatible with IEEE 802.3at Power over Ethernet plus end-span/mid-span PSE
- Provides DC 52V~55V power over RJ45 Ethernet cable to devices with Ethernet port
- RJ45 PoE++ port with built-in 802.3bt type-4 PoE 60W or 95W injector function
- Auto detects powered device (PD)
- Circuit protection prevents power interference between ports
- Remote power feeding up to 100m
- IEEE 802.3bt/IEEE 802.3at splitter devices compatibility

Layer 2 Features

- Store-and-Forward mechanism
- Non-blocking full wire-speed forwarding rate
- IEEE 802.1Q Tag VLAN transparent, multicast pass through
- 9K jumbo frame
- IEEE 802.3x full-duplex and half-duplex back-pressure flow control to eliminate the loss of packets

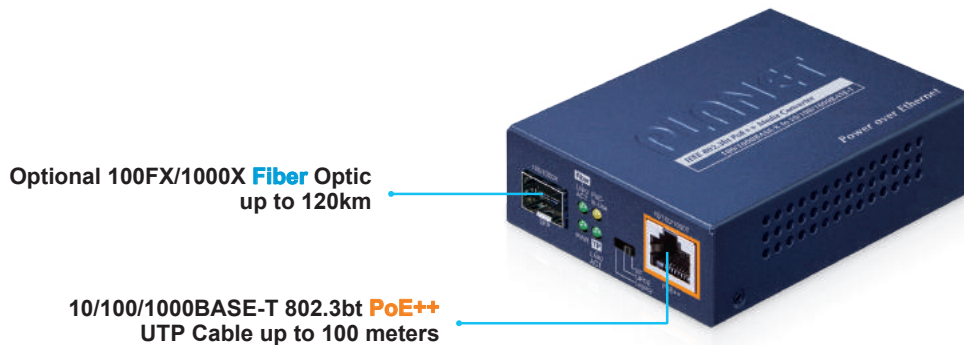
Mechanical

- Metal case
- LED indicators for easy network diagnostics
- DIP switch for PoE power feeding options (BT/UPOE/Legacy) selection
- DC 52V~55V power input socket
- Wall mounting or DIN-rail installation (optional)
- Compact in size, easy installation

High Performance and Steady Network Communications Guaranteed Despite Distance Extension

The GUP-805A-60W and GUP-805A-95W extend communication distance with high Gigabit performance via SFP slot and SFP transceiver. The GUP-805A-60W and GUP-805A-95W provide media conversion between 10/100/1000BASE-T and 100/1000BASE-X interfaces for various fiber optic applications. The available SFP LC fiber interfaces are shown below:

Optic Mode	Connector Type	Distance
Multi-mode	Duplex LC	220m/550m/2km
Single mode	Duplex LC	20/40/60/80/120km
Single mode WDM	Simplex LC	2/10/20/40/80/120km



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 GUP-805A-60W and GUP-805A-95W provide one DIP switch for multi-PoE operation modes that include 60-watt and 95-watt 802.3bt type-4 PoE++ mode, UPOE 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.



Multi-PoE Operation Modes Offered for Your Preferred Application

60W 95W | 802.3bt PoE++ | 100/1000X SFP | Compact Size

100FX/1000X SFP Module Up to 120km Optical Fiber

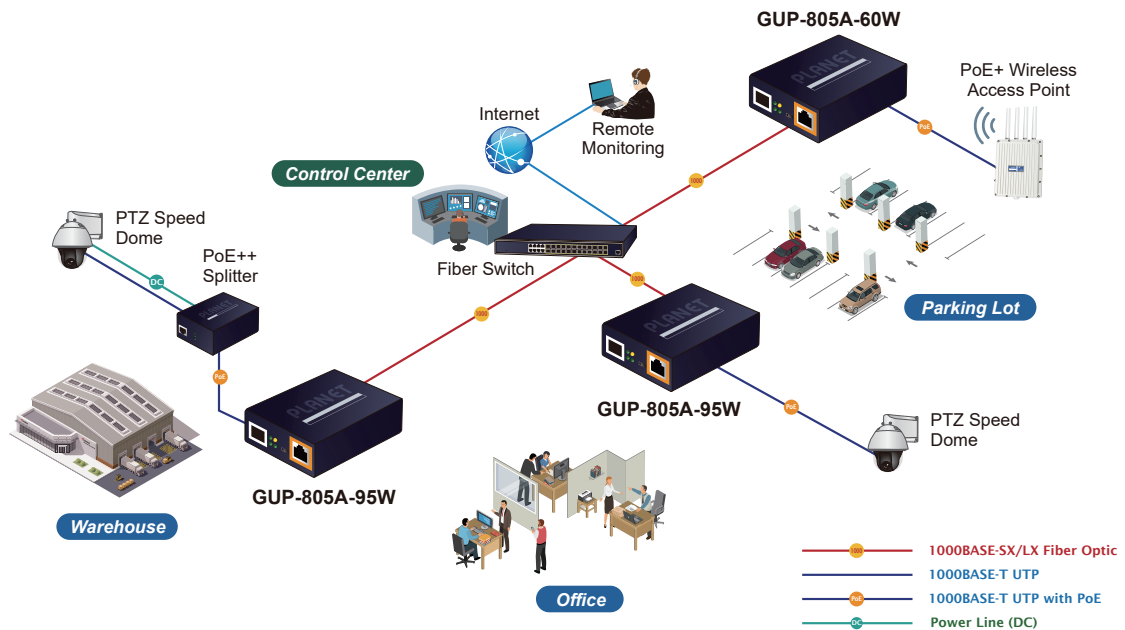
10/100/1000BASE-T 802.3bt PoE++

Three PoE Modes: BT, UPOE, Legacy

Applications

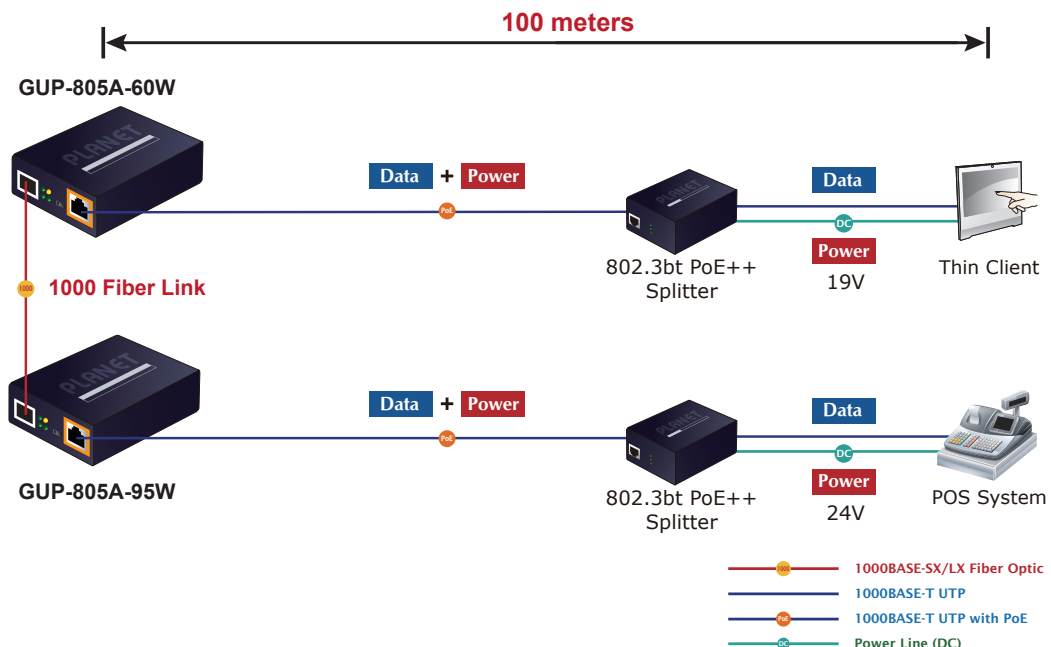
Flexible and User-friendly PoE Deployment with Gigabit SFP Fiber Extension

For the places difficult to find the power outlet, the GUP-805A-60W and GUP-805A-95W provide the easiest way to power network equipment such as PTZ (Pan, Tilt & Zoom) IP cameras, speed dome IP cameras, color touch-screen VoIP telephones, multi-channel (IEEE 802.11a/b/g/n/ac) wireless LAN access points and other network devices that need higher power to function normally. For instance, users can flexibly install security IP camera, wireless access point and other IEEE 802.3bt/at/af compliant network equipment in the public areas such as stations, freeways, airports and campuses for surveillance and wireless roaming needs.



Gigabit 802.3bt PoE++ and PoE+ Network Deployment Solution

PLANET GUP-805A-60W and GUP-805A-95W can easily build an 802.3BT PoE++ networking solution for the enterprises. For instance, they can work with the POS system and thin client to perform comprehensive security protection for today's businesses. The GUP-805A-60W or GUP-805A-95W and 802.3bt PoE++ Splitter-POE-173S operate as a pair to provide the easiest way to power your Ethernet devices which need high power input. Receiving data and power from the GUP-805A-60W and GUP-805A-95W, the POE-173S separates digital data and power into three optional outputs (12V, 19V or 24V DC) to non-PoE devices such as laptops, Thin Client, POS System, PTZ (pan, tilt & zoom) network cameras, PTZ speed dome, color touch-screen IP phones, multi-channel wireless LAN access points and other network devices at distance up to 100 meters.



Specifications

Model	GUP-805A-60W	GUP-805A-95W
Interface		
Copper Port	10/100/1000BASE-T Ethernet RJ45 interface Auto-negotiation, auto MDI/MDI-X with PoE injector function	
SFP Interface	100/1000BASE-X SFP interface	
Fiber Mode	May vary on SFP Module	
Fiber Port Type (connector)	SFP, LC type	
Fiber Maximum Distance	May vary on SFP Module	
Power Over Ethernet		
PoE Output	IEEE 802.3af Power over Ethernet PSE IEEE 802.3at Power over Ethernet Plus PSE IEEE 802.3bt Power over Ethernet Plus Plus PSE	
Power Output	PoE 52-55V DC, 60 watts	PoE 52-55V DC, 95 watts
PoE Power Budget	60 watts	95 watts
PoE Power Supply Type	End-span + Mid-span	
Power Pin Assignment	<ul style="list-style-type: none"> ■ 802.3bt: 1/2(-), 3/6(+), 4/5(+), 7/8(-) ■ End-span: 1/2(-), 3/6(+) ■ Mid-span: 4/5(+), 7/8(-) 	
Hardware Specifications		
Enclosure	Metal case	
Dimensions (W x D x H)	94 x 70 x 26 mm	
Weight	144g	
LED	System: PWR (Green) Fiber 100/1000BASE-X: LNK/ACT(Green) TP 10/100/1000BASE-T: LNK / ACT(Green) PoE: Power-in-use (Amber)	
DIP Switch	PoE power feeding options (BT/UPOE/Legacy) selection	
Power Supply	DC 52V~55V Power Socket, external AC-to-DC adapter	
Installation	Wall-mount or DIN-rail installation(Optional)	
Layer 2 Features		
Switch Architecture	Store-and-Forward	
Forwarding Rate	Non-blocking full wire-speed forwarding rate	
Flow Control	Back pressure for half duplex mode IEEE 802.3x pause frame for full duplex mode	
Maximum Frame Size	9K	
Standards Conformance		
Regulatory Compliance	FCC Part 15 Class A, CE	
Protocols and Standards Compliance	IEEE 802.3 Ethernet IEEE 802.3u 100BASE-TX/100BASE-FX IEEE 802.3ab Gigabit Ethernet over TP IEEE 802.3z Gigabit Ethernet over Fiber Optic IEEE 802.3x Flow Control IEEE 802.3af Power over Ethernet IEEE 802.3at Power over Ethernet Plus IEEE 802.3bt Power over Ethernet Plus Plus	
Cables	TP: Cat 3/4/5/5e/6 UTP cable Fiber: Multi-mode: 50/125µm or 62.5/125µm optic fiber Single-mode: 9/125µm optic fiber	
Environment		
Temperature	Operating: 0 ~ 50 degrees C Storage: -10 ~ 70 degrees C	
Humidity	5% ~ 95% non-condensing	

Related Products

IGUP-805AT	Industrial 1-Port 100/1000X SFP to 1-Port 10/100/1000T 802.3bt PoE++ Media Converter
IGUP-1205AT	Industrial 2-Port 100/1000X SFP to 1-Port 10/100/1000T 802.3bt PoE++ Media Converter
IGUP-2250AT	Industrial 2-Port 100/1000X SFP to 2-Port 10/100/1000T 802.3bt PoE++ Media Converter
GS-4210-16UP4C	16-Port 10/100/1000T 802.3bt PoE++ plus 4-Port Gigabit TP/SFP Combo Managed Switch
GS-4210-24UP4C	24-Port 10/100/1000T 802.3bt PoE++ plus 4-Port Gigabit TP/SFP Combo Managed Switch
GS-4210-24HP2C	4-Port 10/100/1000T 802.3bt PoE + 20-Port 10/100/1000T 802.3at PoE + 2-Port Gigabit TP/SFP Combo Managed Switch
GS-4210-8HP2S	2-Port 10/100/1000T 802.3bt PoE + 6-Port 10/100/1000T 802.3at PoE + 2-Port 100/1000X SFP Managed Switch
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

Available 100Mbps Modules

Fast Ethernet Transceiver (100BASE-X SFP)

Model	Speed (Mbps)	Connector Interface	Fiber Mode	Distance	Wavelength (nm)	Operating Temp.
MFB-FX	100	LC	Multi Mode	2km	1310nm	0 ~ 60 degrees C
MFB-F20	100	LC	Single Mode	20km	1310nm	0 ~ 60 degrees C
MFB-F40	100	LC	Single Mode	40km	1310nm	0 ~ 60 degrees C
MFB-F60	100	LC	Single Mode	60km	1310nm	0 ~ 60 degrees C
MFB-F120	100	LC	Single Mode	120km	1310nm	0 ~ 60 degrees C

Fast Ethernet Transceiver (100BASE-BX, Single Fiber Bi-directional SFP)

Model	Speed (Mbps)	Connector Interface	Fiber Mode	Distance	Wavelength (TX)	Wavelength (RX)	Operating Temp.
MFB-FA20	100	WDM(LC)	Single Mode	20km	1310nm	1550nm	0 ~ 60 degrees C
MFB-FB20	100	WDM(LC)	Single Mode	20km	1550nm	1310nm	0 ~ 60 degrees C

Available 1000Mbps Modules

Gigabit Ethernet Transceiver (1000BASE-X SFP)

Model	DDM	Speed (Mbps)	Connector Interface	Fiber Mode	Distance	Wavelength (nm)	Operating Temp.
MGB-GT	--	1000	Copper	--	100m	--	0 ~ 60 degrees C
MGB-SX(V2)	YES	1000	LC	Multi Mode	550m	850nm	0 ~ 60 degrees C
MGB-SX2(V2)	YES	1000	LC	Multi Mode	2km	1310nm	0 ~ 60 degrees C
MGB-LX(V2)	YES	1000	LC	Single Mode	20km	1310nm	0 ~ 60 degrees C
MGB-L40	YES	1000	LC	Single Mode	40km	1310nm	0 ~ 60 degrees C
MGB-L80	YES	1000	LC	Single Mode	80km	1550nm	0 ~ 60 degrees C
MGB-L120(V2)	YES	1000	LC	Single Mode	120km	1550nm	0 ~ 60 degrees C

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

Model	DDM	Speed (Mbps)	Connector Interface	Fiber Mode	Distance	Wavelength (TX)	Wavelength (RX)	Operating Temp.
MGB-LA10(V2)	YES	1000	WDM(LC)	Single Mode	10km	1310nm	1550nm	0 ~ 60 degrees C
MGB-LB10(V2)		1000	WDM(LC)	Single Mode	10km	1550nm	1310nm	0 ~ 60 degrees C
MGB-LA20(V2)	YES	1000	WDM(LC)	Single Mode	20km	1310nm	1550nm	0 ~ 60 degrees C
MGB-LB20(V2)		1000	WDM(LC)	Single Mode	20km	1550nm	1310nm	0 ~ 60 degrees C
MGB-LA40(V2)	YES	1000	WDM(LC)	Single Mode	40km	1310nm	1550nm	0 ~ 60 degrees C
MGB-LB40(V2)		1000	WDM(LC)	Single Mode	40km	1550nm	1310nm	0 ~ 60 degrees C
MGB-LA80	YES	1000	WDM(LC)	Single Mode	80km	1490nm	1550nm	0 ~ 60 degrees C
MGB-LB80		1000	WDM(LC)	Single Mode	80km	1550nm	1490nm	0 ~ 60 degrees C