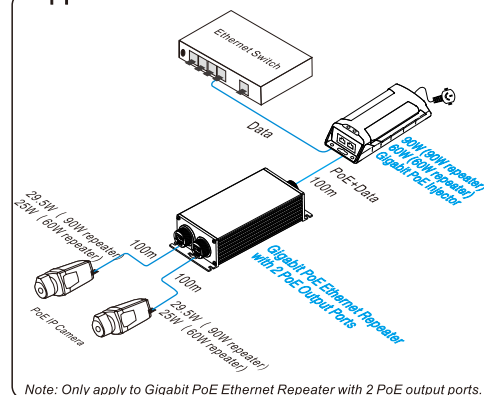# Gigabit 802.3af/at/bt PoE Ethernet Repeater
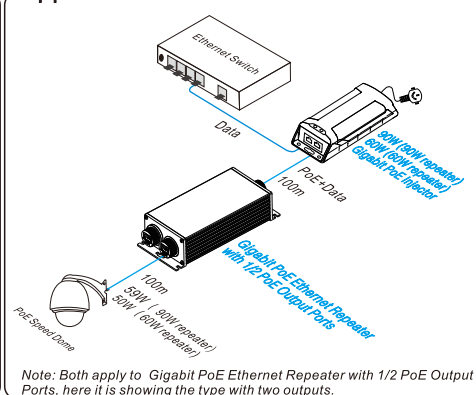# User Manual

13.238.101.1959
V1.0

Gigabit 802.3af/at/bt PoE Ethernet Repeater, which uses advanced network cable drive and power supply technology to extend 1000Mbps Ethernet signal to 100 meters, greatly extending the transmission distance and providing 50~57V PoE power at the same time, the PoE output power can be up to 50W/80W. IP67-rated, industrial grade enclosure can meet requirement of harsh environment,working temperature can be up to -40~75℃. it is widely used in security surveillance and network project.

Application 1

Note: Only apply to Gigabit PoE Ethernet Repeater with 2 PoE output ports.

Application 2

Note: Both apply to Gigabit PoE Ethernet Repeater with 1/2 PoE Output Ports, here it is showing the type with two outputs.
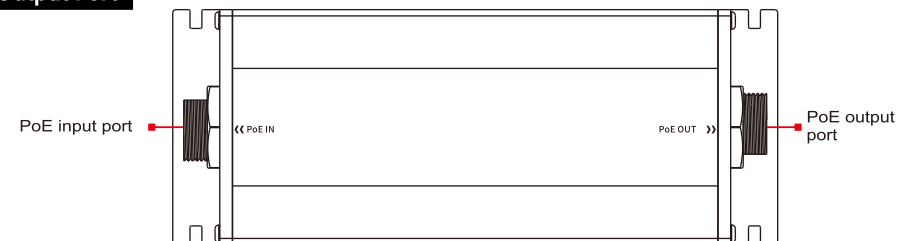
■ Features

● Including four models.
   --UTP7201GR-BTPoE(60), UTP7201GR-BTPoE(90): provide 2* 10/100/1000Mbps PoE Ethernet ports, one 802.3af/at/bt PoE input port, one 802.3af/at/bt PoE output port.
   --UTP7202GR-BTPoE(60), UTP7202GR-BTPoE(90): provide 3* 10/100/1000Mbps PoE Ethernet ports, one 802.3af/at/bt PoE input port, two 802.3af/at/bt PoE output ports.
   All models can meet the requirements of 802.3bt PoE powered devices such as PTZ speed dome camera, digital display.
● Use advanced network cable drive technology, the transmission distance can be up to 100m.
● PoE power supply is compatible with End-span and Mid-span.
● Meet standards of IEEE 802. 3 10BASE-T, IEEE 802. 3u 100BASE-TX, IEEE 802. 3ab 1000Base-T.
● Excellent circuit isolation protection, effectively improve product's lightning protection, ESD and anti-interference ability.
● Easy to install, special designed waterproof joint allows RJ45 pass through directly, no need for RJ45 assembly.
● Plug and play, no setting required.

⚠ Notice
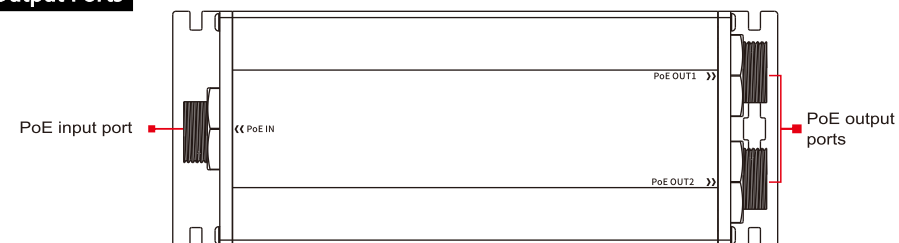
It is recommended to use the standard Cat6 network cable (or higher) to reach the optimal transmission distance.

■ Board Diagram

1 Output Port

PoE input port

PoE IN   PoE OUT

PoE output port

2 Output Ports

PoE input port

PoE IN

PoE OUT1

PoE OUT2

PoE output ports

■ Installation Steps

Please check the following items before installation, if missing, please contact the dealer.

● PoE Ethernet Repeater   1pcs
● Waterproof Joint   2pcs(UTP7201GR-BTPoE(60)/(90)/ 3pcs (UTP7202GR-BTPoE(60)/(90))
● User Manual   1pcs

Installation steps:
1) Please turn off the signal source and the device's power, installation with power on may damage the device.
2) Check if the network cable and other transmission line that will be used is occupied by other device.
3) Use a network cable to connect PoE IN port of the repeater with PoE adapter or switch.
4) Use a network cable to connect PoE powered device with PoE OUT port of repeater.
5) Check if the installation is correct and device is good, make sure all the connection is reliable and power up the system.

⚠ Notice

The PoE IN and PoE OUT Ports must be correctly connected, or the repeater will not work.

■ Hardware Specifications

Products	UTP 7201GR-BTPoE(60)	UTP 7201GR-BTPoE(90)	UTP 7202GR-BTPoE(60)	UTP 7202GR-BTPoE(90)
PoE Input Port	10/100/1000Base-TX RJ45 IEEE 802.3bt PoE Input Input Power 50~57V DC Max 60W	10/100/1000Base-TX RJ45 IEEE 802.3bt PoE Input Input Power 50~57V DC Max 90W	10/100/1000Base-TX RJ45 IEEE 802.3bt PoE Input Input Power 50~57V DC Max 60W	10/100/1000Base-TX RJ45 IEEE 802.3bt PoE Input Input Power 50~57V DC Max 90W
PoE Output Port	1*10/100/1000Base-TX RJ45 IEEE 802.3bt/at PoE Output Output Power: Max 58W in total 58W@101m, 50W@200m	1*10/100/1000Base-TX RJ45 IEEE 802.3bt/at PoE Output Output Power: Max 81W in total 73.7W@101m, 59W@200m	2*10/100/1000Base-TX RJ45 IEEE 802.3bt/at PoE Output Output Power: Max 58W in total 58W@101m, 50W@200m	2*10/100/1000Base-TX RJ45 IEEE 802.3bt/at PoE Output Output Power: Max 81W in total 73.7W@101m, 59W@200m
Cascade connection	Support 3 grade	Support 3 grade	Support 3 grade	Support 3 grade
PoE Standard	IEEE 802.3 af/at/bt			
PoE Power Supply Type	Mid-span and End-span			
PoE Pin Assignment	1/2(+), 3/6(-),4/5(+), 7/8(-)			
Standards	IEEE 802.3, IEEE 802.3u,IEEE 802.3ab			
Forwarding Modes	Store and Forward			
Transmission Distance	100m			
MAC Table	8k			
Switching Capacity	4Gbps		6Gbps	
Packet Forwarding Rate	2.98Mpps		4.46Mpps	
Flow Control	IEEE 802.3x pause frame for full duplex, Back pressure for half duplex			
Jumbo Frame	10k			
Surge Immunity	6kV, Per: IEC61000-4-5			
ESD Protection	6kV 1a Contact Discharge Leve 3, 8kV 1b Air Discharge Level 3, Per: IEC61000-4-2			
Protection Level	IP 67			
Operating temperature	−40℃~75℃			
Storage temperature	−40℃~85℃			
Operating Humidity	0~95% (Non-condensation)			
Dimension(W*D*H)	193mm*75mm*38mm			
Gross Weight	558g		576g	
Net Weight	423g		467g	
Material	Aluminum			
Certifications	CE, FCC, RoHS			

■ After-service（Please cut the warranty card along the dotted line）

Warranty Card

Customer Name	
Address	
Tel.	
Model No. Serial No.	
Purchase Date	

Maintenance Record

Maintenance Company		
Fault Phenomenon		
Cause & Solution		
Maintenance Date		Inspection Date
Handled By		
Maintenance Company		
Fault Phenomenon		
Cause & Solution		
Maintenance Date		Inspection Date
Handled By		