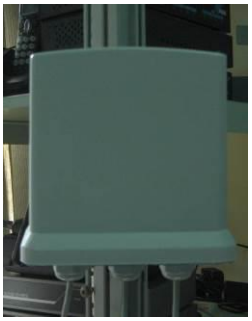
PR100GB

GbE 802.3bt PoE Repeater

PR100GB Front View

PR100GB Rear View



PR100GB-ODU
Front View

PR100GB-ODU
Side View

PR100GB is a Gigabit IEEE802.3bt Power-over-Ethernet (PoE++) Repeater providing a 10/100/1000Mbps Ethernet transmission for 100-meter distance with one Gigabit Ethernet LAN port extending another 100-meter with PoE capability, plus another Gigabit Ethernet LAN port without PoE. It forwards both 10/100/1000M Ethernet and PoE for another 330ft (100m) using an innovative power-processing scheme, and multiple units can be deployed in series for longer distances without degradation in network speed or latency.

Powered by a 10/100/1000Mbps PoE switch (or PoE injector), PR100GB requires no local power in the middle of the cable making it extremely easy to connect and power IP cameras for at least 3~4 times further distance.

For a simple application, a PR100GB allows to connect one PoE Device (PD) located 200 meters away from the Gigabit Ethernet PoE switch. The PoE switch delivers PoE power over the first 100 meters of Cat5E cable to the PR100GB, and the PR100GB restores the Ethernet signal and forwards remaining PoE power to the PD 100m away. The PR100GB requires no local power supply, and the PR100GB presents no restriction to the Ethernet network connection. Outdoor units of PR100GB-ODU are also available with IP65 rating enclosures.

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Advantages:

- Repeat and extend the Power over Ethernet cable installation for another 100 meters
- No local power required
- Fully 10/100/1000M Ethernet protocol transparent – no restrictions to network traffic
- 10/100/1000Mbps Ethernet Wire Speed
- Compatible with IEEE 802.3bt/at/af PoE and midspan PoE standard
- IP65 Weather-Proof for PR100GB-ODU outdoor unit
- Simple installation – Plug & Play

PoE Repeater Specifications:

Ethernet Interface:

- IEEE 802.3x, Auto-Detection for 10/100/1000BaseT and full/half duplex
- Automatic MDI/MDIX function
- PoE Input Port: RJ-45 Connector x 1
- PoE Output Port : RJ-45 Connector x 1
- Data Output Port: RJ-45 Connector x 1
- Port-based VLAN function for LAN ports (option)

POWER:

- IEEE 802.3bt/at/af Compliant with voltage within 44-57 Volt
- Maximum Power Dissipation: 2.5 Watts

LED Indicators:

- **POWER:** Power is ON
- **POE IN:** GE Port with PoE IN
- **DATA OUT:** GE Port
- **POE OUT:** GE Port with PoE OUT

Regulations & Approvals:

- FCC Rules Part 15
- CE

Physical Dimension:

PR100GB WxDxH: 132.1 x 90 x 28 (mm)

PR100GB-ODU WxDxH: 180 x 165 x 95 (mm)

Operating Environment:

- Humidity: 5% to 95% non-condensing Temperature: 0 ~ 50 degree C

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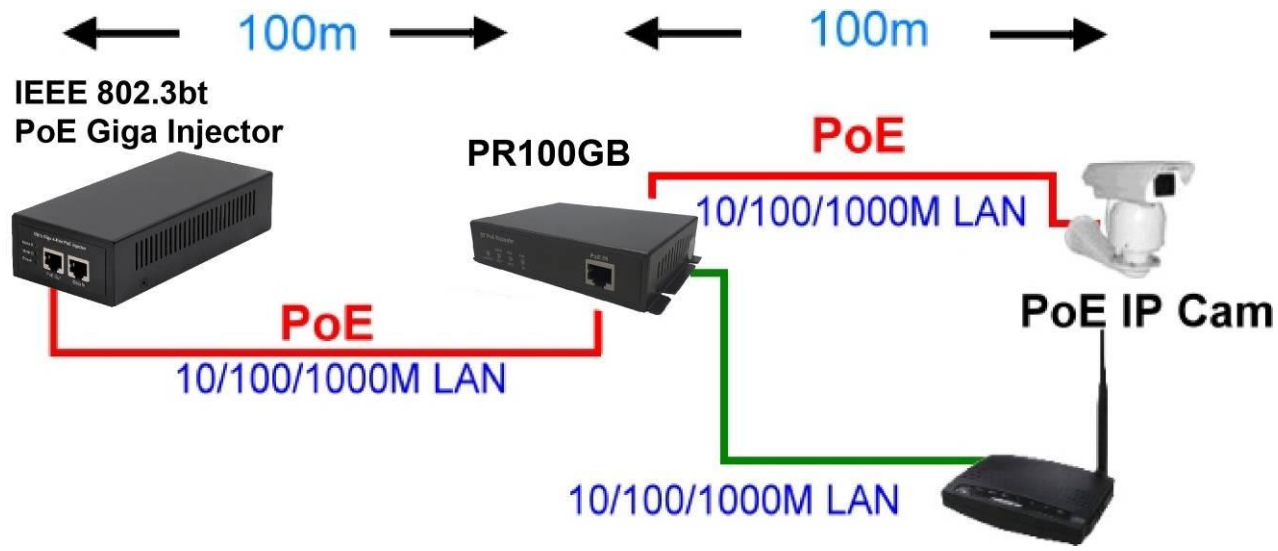
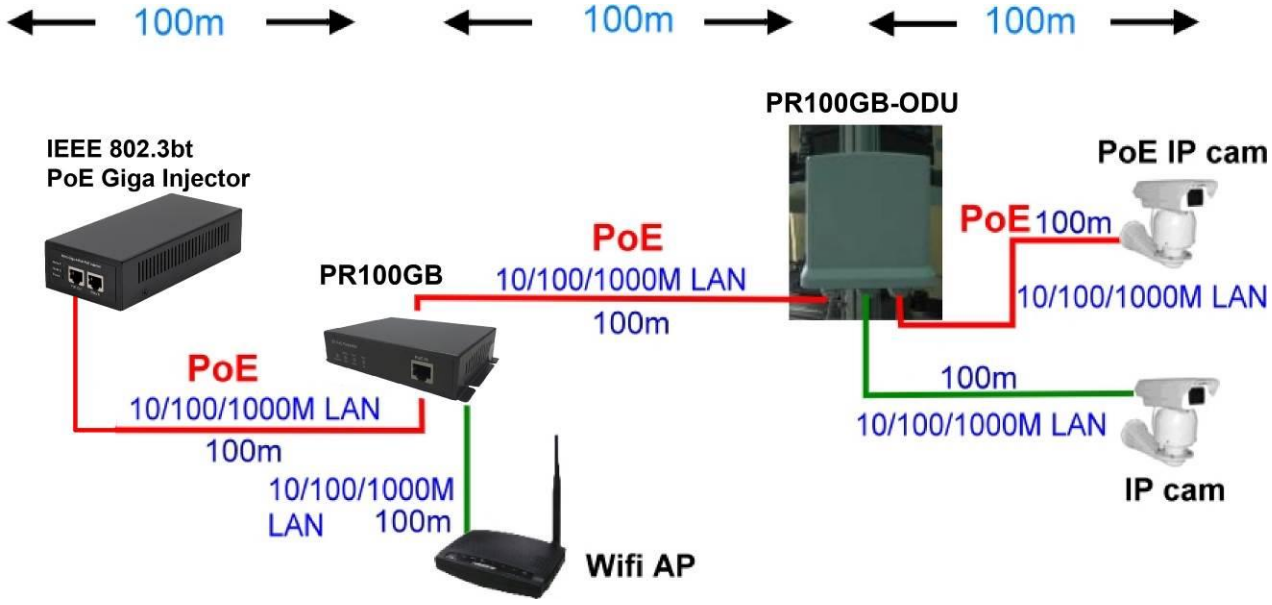
Applications: IP Surveillances with PR100GB





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Power Test Results:

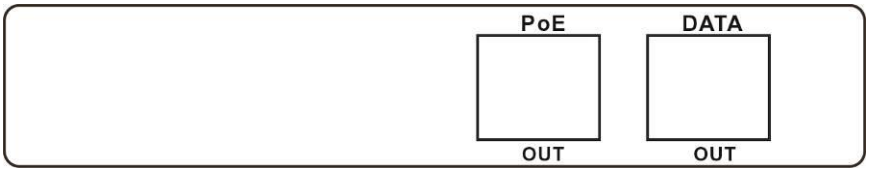
Max. Output Power of PR100GBs at distance 200~500 meters

Max. Power Test Results of PR100GB xN for 200~500meters
connection from PoE BT Injector PU100GB

	After 100M			PR100GB-1		After 100M			PR100GB-2				
Distance(m)	(V)	(A)	(W)	(VIN)	(VOUT)	(V)	(A)	(W)	(VIN)	(VOUT)			
500	48	1.45	69.6	47.7	56.3	51	1.03	53	50.8	56.5			
400	47	1.56	74	46.6	56.2	51	1.05	59	50.1	56.5			
300	47	1.62	78	46.1	56.2	50	1.2	61	49.8	56.5			
200	47	1.67	78	46.1	56.1								
	After 100M			PR100GB-3		After 100M			PR100GB-4		After 100M + Power Meter		
Distance(m)	(V)	(A)	(W)	(VIN)	(VOUT)	(V)	(A)	(W)	(VIN)	(VOUT)	(V)	(A)	(W)
500	53	0.82	44	52.1	56.3	54	0.7	38	53	56.2	53	0.59	31.27
400	52	0.91	47	51.6	56.6						53	0.66	34.98
300											52	0.94	48.88
200											50	1.21	60.5

Front Panel

Rear Panel



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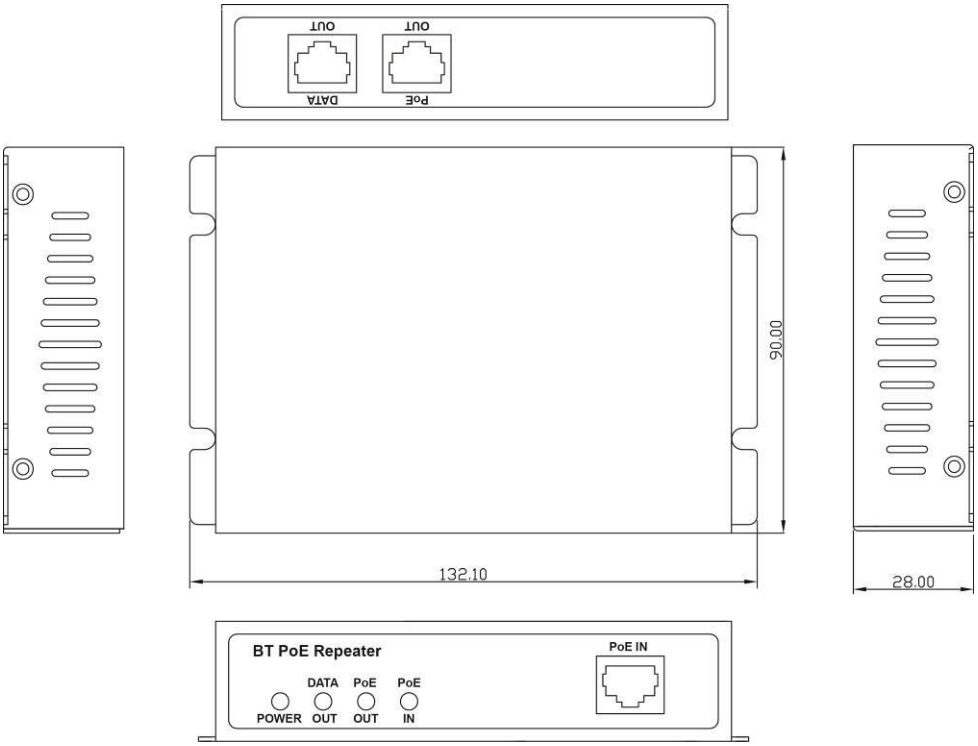
Mechanical Drawing



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