PR100

Ethernet & PoE Repeater

PR100 Front View

PR100 Rear View

PR100-ODU
Front View

PR100-ODU
Side View

PR100 is an Ethernet and Power-over-Ethernet Repeater providing a 100/100Mbps Ethernet transmission for 100m distance and extend Ethernet connectivity another 100m with power over Ethernet capability.   It forwards both Ethernet and PoE for another 330ft (100m) using an innovative power-processing scheme and multiple units can be deployed in series for even longer distances, with no degradation in network speed or latency.   PR100 itself is powered by an Ethernet PoE switch (or PoE injector) and so requires no separate power connection in the middle of the cable, making it extremely easy to connect and power IP cameras two or three times further than previously possible without going to fiber or installing midspan power sources.

In the simplest application, a PR100 allows an IP camera to be located 200-300 meters away from a POE switch. The switch delivers POE power over the first 100 meters of Cat5 cable to the PR100, and the PR100 restores the Ethernet signal and forwards remaining POE power to the camera. The PR100 requires no local power supply, and the PR100 presents no restriction to the camera network connection. Typically, the POE switch would be confined to a centrally located equipment room, and would connect to several IP cameras distributed about the site. With PR100, each camera may have its own dedicated connection to the switch, and power cable installation to remote switches or cameras is not required.

Advantages:

- Extends Ethernet cable installations for another 100 meters
- Forwards Power Over Ethernet (POE) to remote devices
- No power cable installation required
- Fully Ethernet protocol transparent – no restrictions to network traffic
- 100Mbps Ethernet Wire Speed
- Compatible with IEEE 802.3af POE standard
- IP65 Rain-Proof for PR100-ODU outdoor unit
- Simple to install – Plug & Play

PoE Repeater Specifications:

LAN Interface:

- IEEE 802.3x, Auto-Detection for 10/100BaseT and full/half duplex
- Standard Straight-through, or Cross-over CAT 5 cable
- Automatic MDIX function
- RJ-45 Connector x 2

POWER:

- IEEE 802.3af Compliant with voltage within 44-57Volt
- Maximum Power Dissipation: 2.5 Watts
- POE IN: IEEE 802.3af Class 0 (Max 12.95 Watts)
- POE OUT: IEEE 802.3af Class 1 or 2 (Max 6.49 Watts)

LED Indicators:

- **POWER:** Power is ON   **LAN OUT:** Data Activity of LAN OUT Port
- **LAN IN:**   Data Activity of LAN IN Port

Regulations & Approvals:

- FCC Rules Part 15
- CE

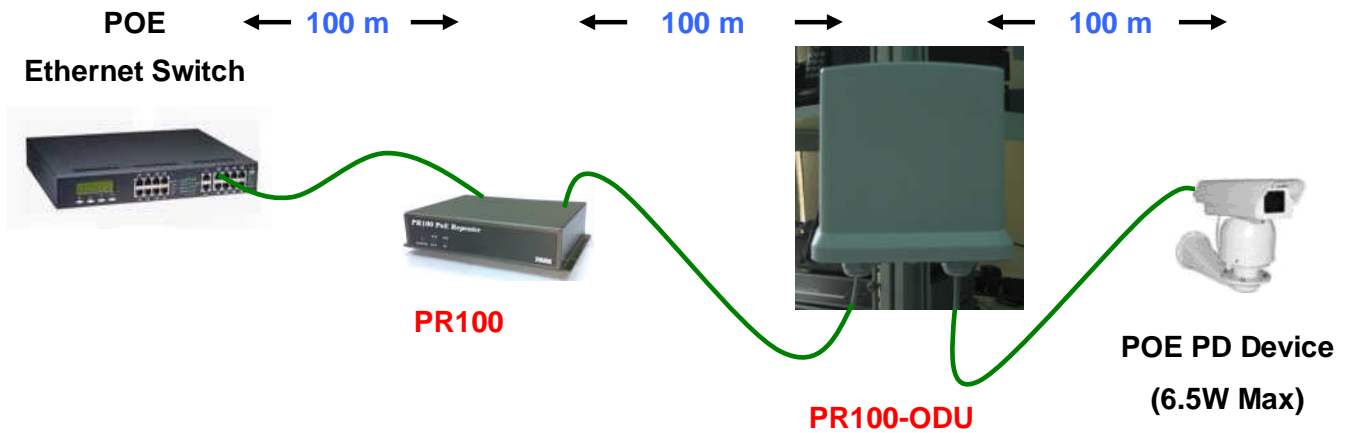### Physical Dimension:

PR100 WxDxH: 120 x 90 x 28 (mm)   PR100-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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Application Diagram:

LAN & POE Repeater

POE Ethernet Switch ← 100 m → ← 100 m → ← 100 m →

PR100

PR100-ODU

POE PD Device (6.5W Max)

Maximum Range:

POE PD device class	3 or 0	2	1	(None POE)
Device power up to:	12.95W	6.49W	3.84W	n/a
Range with Standard PSE switch:	n/a	300m	400m	700m
Range with Hi-Power PSE switch:	300m	500m	700m	1000m

Note: These distances are typical results when used with standard 24AWG Cat5, Cat5e or Cat6 cable.

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