

Managed Long Reach PoE Extension System

Introduction



Proscend 708MP/100MP Managed Long Reach PoE Extension System is designed to extend the reach of Ethernet Data and IEEE 802.3at/802.3af Power over Ethernet beyond its natural limitation of 100m for the network infrastructure. The solution features **708MP** 8-Port Long Reach PoE Managed Switch with 500 Watts of power budget that can transmit data and power over a single pair of telephone grade UTP wire up to 1,200m or coaxial cable up to 1,800m.

708MP(Master) can connect up to 8 units of **101MP**(Client) PoE Extender with four PoE (PSE) ports or **100MP**(Client) PoE Extender with one PoE (PSE) port at remote sites. Without the need for local power supply, each **101MP/100MP** provides maximum power budget of 30W that can support any remote IEEE 802.3at/af powered device (PD). It enables centralized management of power supply from a single location for easy, efficient and cost-effective installation.

Proscend 708MP/100MP Managed Long Reach PoE Extension System is an ideal PoE extension solution for service providers to deploy networking applications in public areas that requires Wireless AP, IP Phones and IP Cameras.

Features

- Complies to IEEE 802.3at PoE
- Industrial-Grade Extenders for applications in harsh environment
- Simultaneous transmission of Ethernet data and PoE Power over UTP wire or coaxial cable
- Centralized management of power supply
- Eliminated the need for DC power supply at remote sites
- Easy cabling for quick installation
- Long transmission distance up to 1000 m
- Quick deployment and easy maintenance.
- Flexible and efficient power management
- Dip Switch to enable DC power supply and provide full 30W to each of the four PoE ports

Specifications

Hardware Interfaces

708MP 8-Port Power over Copper Managed Switch

- RJ-11 x 8 Copper Ports or BNC Female x 8 Coaxial Ports
- 2 x Gigabit Ethernet Combo ports (100/1000 Based-T and SFP)
- 1 x RJ-45 Console Port
- 1 x RJ-45 Alarm Port for 4 Alarm Inputs

100MP Long Reach PoE Extender with Single PoE Port

- RJ-11 for Copper Port
- 1 x RJ-45 10/100/1000 Base-T IEEE 802.3at POE Port

LED Indicators

708MP 8-Port Power over Copper Managed Switch

- System: PWR/Off
- Gigabit Port x 2 : LINK/ACT, SPEED 1000/100
- Alarm: RUN/ALARM
- VDSL Link x 8: VDSL Link/Sync
- PoE x 8: PoE Link/Off

100MP Long Reach PoE Extender with Single PoE Port

- PoE: PoE Port Status ON/OFF
- 1000: ON/OFF
- 10/100: ON/OFF
- Power: ON/OFF
- Remote: Remote Power ON/OFF
- Copper Port Link: ON/OFF/Blinking

Physical

- 708MP Dimensions (WxHxD): 404 x 274 x 44.5 mm, 1U height
- 708MP Power: 100-240 V AC, 50-60 Hz
- 100MP Dimensions (WxHxD): 90.5 x 40 x 117 mm

Operating Environment

- 708MP Operating Temperature: 0 to +50°C
- 100MP Operating Temperature: -40 to +75°C
- Storage Temperature: -40 to +85°C
- Humidity: 10% - 95% (non-condensing)

Power Management

708MP 8-Port Power over Copper Managed Switch

- Power Consumption: 500 Watts maximum
- 40 Watts for 100MP POE Ports
- Power priority per port
- Port On/Off
- Automatic short protection
- Power usage statistics and monitoring

100MP Long Reach PoE Extender with Single PoE Port

- Option 1: Remotely powered by 708MP 8-Port Long Reach POE Managed Switch or 701MP Long Reach POE Extender(CO)
- Option 2: DC 48-57V 0.7A max ,over Terminal Block Option 2: DC 48-57V 0.7A max ,over Terminal Block (External Power Adaptor not included)
- Power Consumption: 40 Watts maximum (Estimated when PoE is ON)
- Over current protection
- Automatic short protection

Protocol Support

708MP 8-Port Power over Copper Managed Switch

- VDSL2 ITU-T G.993.2
- VDSL2 Profiles: 8a, 8b, 8c, 8d, 12a, 12b, 17a and 30a
- 802.1d L2 Bridging
- DHCP /Client/Relay/Option82
- IEEE 802.1q VLAN Tag base
- VLAN Stacking (Q-in-Q)
- IEEE 802.1d Spanning Tree Protocol (STP)
- IEEE 802.3ad Link Aggregation

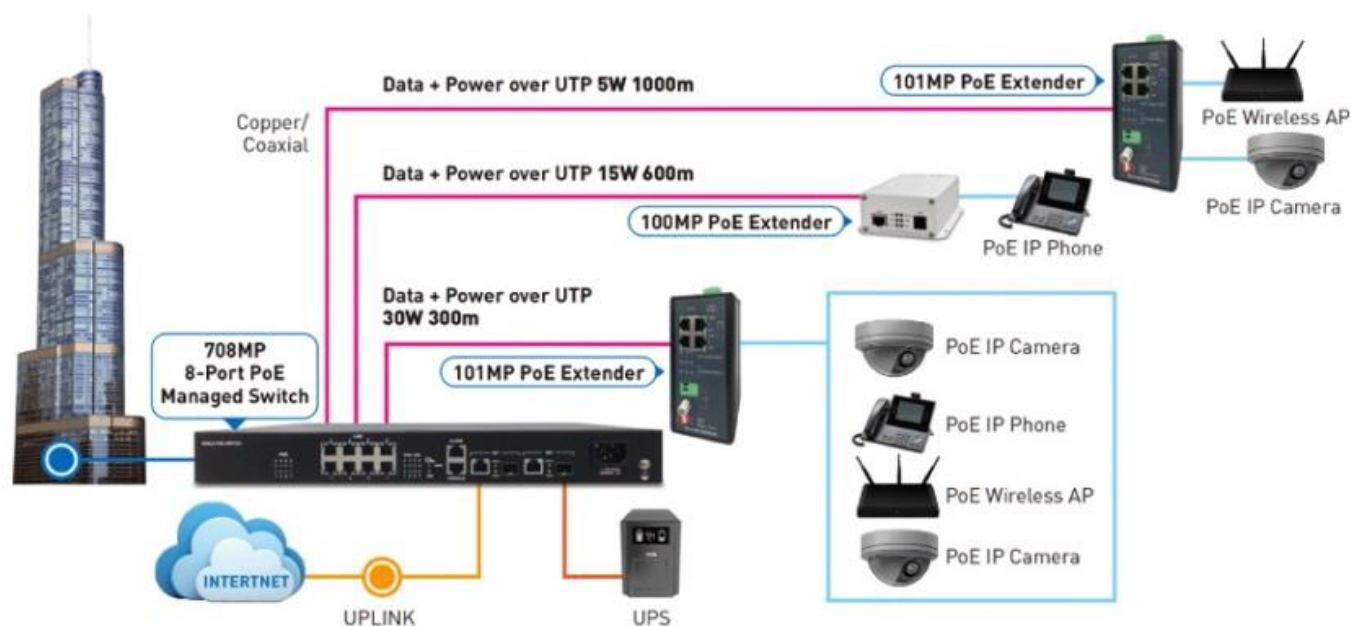
100MP Long Reach PoE Extender with Single PoE Port

- VDSL2 ITU-T G.993.2
- VDSL2 Profiles: 17a and 30a

Regulatory Compliance

- CE
- FCC Part 15 Class A
- EN60950

Application



Performance

Distance	24AWG Copper Wire	
	Line Rate	PoE Output (Watts)
300m	100Mbps	30W
400m	90Mbps	20W
600m	65Mbps	14W
800m	45Mbps	9W
1000m	35Mbps	6W
1200m	20Mbps	4.5W

* The above data is for reference only, the actual performance may vary depending on the quality of the cable and environmental conditions.

Ordering Information

Model Name	Description
708MP	8-Port Long Reach PoE Managed Switch with 500W Power Budget (UTP Connectors)
100MP	Long Reach PoE Ethernet Extender with 1 PoE port (CPE)

* Features and specifications are subject to change without prior notice.