

Up to 1.2km



IEXT221-PH NEW

Long Reach PoE Extenders (Phone line or Coaxial cable)



This product is intended to extend the reach of Ethernet Data and IEEE 802.3at Power over Ethernet beyond its limitations of 100 meters. The solution works in pairs for point-to-point connectivity. The Local unit can deliver both data and power feeding over a single pair of telephone wire or Coaxial cable up to 1,200 meters. The Remote unit provides one 10/100Base-TX IEEE 802.3at PoE ports for total power budget of 30W and receives its power from the local unit.

These products are particularly designed for harsh environments, such as industrial networking, traffic surveillance, security automation applications, IP surveillance, city security, intelligent transportation systems (ITS) and are also suitable for many military and utility market applications where environmental conditions exceed commercial product specifications (See Figure 1).

Features

- Long transmission data and power feeding distance up to 1200 meter
- Complies with IEEE 802.3at PoE
- Simultaneous transmission of Ethernet data and PoE Power over Phone line wire or coaxial cable
- Centralized management of power supply
- Eliminated the need for power supply at remote sites
- Easy cabling for quick installation
- Quick deployment and easy maintenance.
- Flexible and efficient power management
- Local unit deliver both data and power over one pair copper wire
- Display data rate by LED
- LED display PoE power budget that can be delivered for PD

Specifications

Hardware Standard Interfaces	IEEE802.3	10Base-T
	IEEE802.3u	100Base-TX
	IEEE802.3af	PoE
	IEEE802.3af	PoE+
	ITU-T G.993.2	VDSL2
Port function & Standard	Extension Port : 1x Terminal Block for telephone wire 1x Coaxial connector for Coaxial cable VDSL2 ITU-T G.993.2 Deliver both data and power over one pair copper wire Maximum distance 1.2KM (See table 1 for detail data rate/ Power budget for PoE/distance) Maximum 30W power budget for PoE port , see table 1 for detail about Power budget/Distance	
	Ethernet port : 1x RJ-45 10/100Base-TX with IEEE 802.3at PoE Port (Remote unit IEXT-221-R) 1x RJ-45 10/100Base-TX Port (local unit IEXT-221-L)	
LED	Power 1 & 2: power status (Local unit IEXT-221-PH-L)	
	Power: Power status (Remote unit IEXT-221-R)	
	Ethernet LK/Act: Ethernet port Link /Active	
	Extension LK/Act : Extension port Link /Active	
Protocol Support (Extension port)	PoE: PoE Port Status	
	PoE Budget: PoE power budget can be delivered for PD	
	Line Speed: Link/20/40/60/80/100 Mbps	
Operating Temperature	Transparent bridging to higher layer protocols	
Storage Temperature	-40°C to 75°C	
Humidity	-40°C to 85°C	
Power Supply	10% - 95% (non-condensing)	
Power Consumption	Redundant dual 48VDC (44~57VDC) Input power (Removable Terminal Block)	
Housing	65 Watts maximum	
Dimensions	Rugged Metal, IP30 Protection and fanless	
Weight	TBD	
Installation Mounting	TBD	
MTBF	DIN Rail mounting, or Wall Mounting (Optional)	
Certification	TBD	
EMS	CE	

EMI (Electromagnetic Interference)	FCC Part 15 Subpart B Class A, CE
Railway Traffic	EN50121-4
Immunity for Heavy Industrial Environment	EN61000-6-2
Emission for Heavy Industrial Environment	EN61000-6-4
EMS (Electromagnetic Susceptibility) Protection Level	EN61000-4-2 (ESD) Level 3, Criteria B EN61000-4-3 (RS) Level 3, Criteria A EN61000-4-4 (Burst) Level 3, Criteria A EN61000-4-5 (Surge) Level 3, Criteria B EN61000-4-6 (CS) Level 3, Criteria A EN61000-4-8 (PFMF, Magnetic Field) Field Strength: 300A/m, Criteria A
Safety Shock	UL60950-1 (Pending)
Freefall	IEC60068-2-27
Vibration	IEC60068-2-32

Table 1 : Transmitting rate and PoE Power budget vs distance

Telephone wire – 24AWG Copper Wire			
Distance	Upstream Rate (Mbps)	Downstream Rate (Mbps)	PoE Output Budget
300 m	100	100	30W
400 m	70	70	20W
600 m	45	45	15W
800 m	27	27	7W
1,000 m	18	18	5W
1,200 m	8	16	4W

Coaxial Cable			
Distance	Upstream Rate (Mbps)	Downstream Rate (Mbps)	PoE Output Budget
400 m	100	100	30W
600 m	50	80	20W
800 m	50	80	15W
1,000 m	50	60	10W
1,200 m	50	50	8W

Application

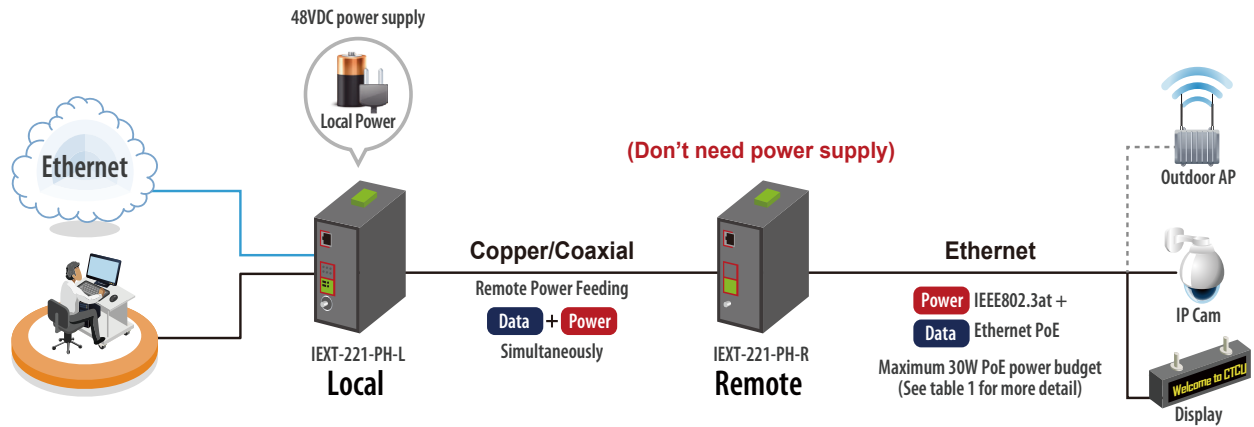


Figure 1 : Remote Power feeding Enable

Ordering Information

Model Name	RJ45 UTP Ethernet	Extension port		Power Input	PoE Power budget (See Table 1)	PoE Port IEEE802.3at	Certification			Operating Temperature
	10/100Base-TX	Terminal	Coaxial	Redundant		Railway EN50121-4	EN61000-6-2 EN61000-6-4	CE FCC		
IEXT221-PH	1	1	1	48VDC	Maximum 30W	1	V	V	V	-40~75°C

Optional Accessories

Wall Mount kit Accessories

IND-WMK02	Wall Mount kit for Industrial product, 184 x 50mm
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Package List

- One pair device of the series (one local and one remote unit)
- Quickly installation guide
- Din Rail bracket with screws
- Terminal block