IEXT224-4PH

Long Reach PoE Extenders
(Phone line and Coaxial cable)

IEXT224-4PH is intended to extend the reach of Ethernet Data and IEEE 802.3at Power over Ethernet beyond its natural limitations of 100 meters. The solution works in pairs for point-to-point connectivity. The unit at the local site can transmit data and remote power feeding power over a single pair of telephone UTP wire or Coaxial cable up to 1,200 meters. The unit at the remote side provides four 10/100Base-TX IEEE 802.3at PoE ports for total power budget of 30W and can receive its power from the local unit when power is unavailable at the remote side.
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.

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 2 wire Phone line wire or coaxial cable
- Centralized management of power supply
- Eliminated the need for power supply at remote site
- Easy cabling for quick installation
- Quick deployment and easy maintenance.
- Flexible and efficient power management
- Dip Switch option so that remote unit that can be powered by remote-side power or local power.
- Display data rate by LED
- Display real power loading by LED

Specifications

Hardware Standard Interfaces	IEEE 802.3	10Base-T
	IEEE 802.3u	100Base-TX
	IEEE 802.3af	PoE
	IEEE 802.3af	PoE+
	ITU-T G.993.2	VDSL2
Power over Copper PoE Extender with 4x 10/100Base-TX IEEE 802.3at PoE Ports		
Network Connector	Terminal Block for 2 wire telephone UTP cable BNC Female for Coaxial Cable 4 x RJ-45 10/100Base-TX IEEE 802.3at PoE Port	
Dip Switch	SW 1: Selectable Asy (30a) or Sym(17a) (VDSL2 Profile)	
	SW 2 : Selectable target SNR margin 6dB or 9dB	
	SW 3 : Selectable Remote Power: OFF: Enable Feeding power by remote unit (Figure 1) ON: Disable Feeding power by remote unit (Figure 2)	
LED	Active: System Status	
	Local PWR : Local Power mode (See Figure 2)	
	Remote PWR: Remote Power (See Figure 1)	
	PoE: PoE Port Status for per PoE Port	
	PoE Output: 5/15/30 Watts (Display total PoE loading) (Remote power mode)	
	Line Speed: Link/20/40/60/80/100 Mbps	
Standards Support	VDSL2 ITU-T G.993.2	
	VDSL2 Profiles: 17a and 30a	
Protocol Support	Transparent bridging to higher layer protocols	
Operating Temperature	-40°C to 75°C	
Storage Temperature	-40°C to 85°C	
Humidity	10% - 95% (non-condensing)	
Power Supply	Redundant dual 48VDC (44~57VDC) Input power (Removable Terminal Block)	
Power Consumption	65 Watts maximum	
Housing	Rugged Metal, IP30 Protection and fanless	
Dimensions	106.5 x 62 x 135 mm (D x W x H)	
Weight	IEXT-224-4PH-L : 705g (local) IEXT-224-4PH-R : 715g (remote)	
Installation Mounting	DIN Rail mounting, and Wall Mounting (Optional)	
MTBF	IEXT224-4PH : IEXT224-4PH-L - 253,543 Hours IEXT224-4PH-R - 233,606 Hours (MIL-HDBK-217)	
Certification		
EMS	CE, FCC	
Safety	EN60950-1	
Shock	IEC60068-2-27	
Freefall	IEC60068-2-32	
Vibration	IEC60068-2-6	
Transmitting rate and PoE Power budget		

2 wire telephone UTP cable – 24AWG Copper Wire

SNR	6dB		6dB		PoE Output Budget
Profile	Asymmetrical		Symmetrical		
Distance	Upstream Rate (Mbps)	Downstream Rate (Mbps)	Upstream Rate (Mbps)	Downstream Rate (Mbps)	
300 m	65	100	100	100	30W
400 m	45	95	70	70	20W
600 m	30	65	45	45	15W
800 m	10	45	27	27	7W
1,000 m	6	35	18	18	5W
1,200 m	1	20	8	16	4W

Coaxial Cable

SNR	6dB		6dB		PoE Output Budget
Profile	Asymmetrical		Symmetrical		
Distance	Upstream Rate (Mbps)	Downstream Rate (Mbps)	Upstream Rate (Mbps)	Downstream Rate (Mbps)	
400 m	100	100	100	100	30W
600 m	50	100	50	80	20W
800 m	50	100	50	80	15W
1,000 m	45	90	50	60	10W
1,200 m	40	70	50	50	8W

Application

Figure 1 : Remote Power feeding Enable

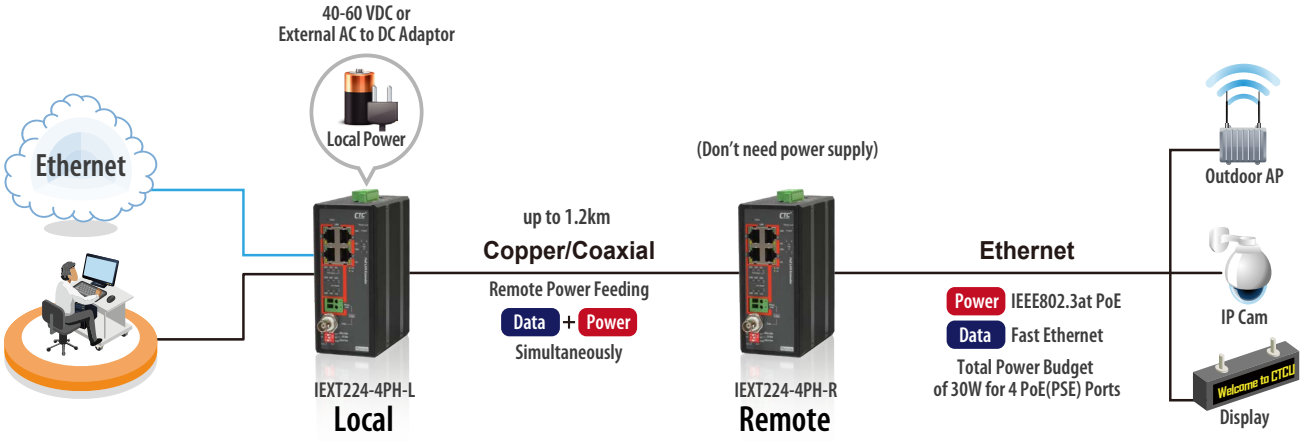
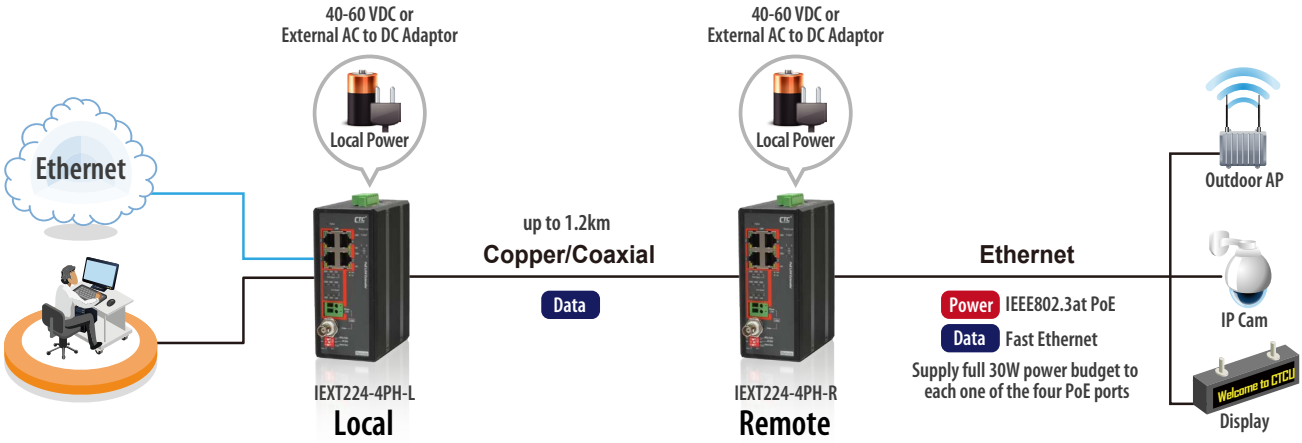
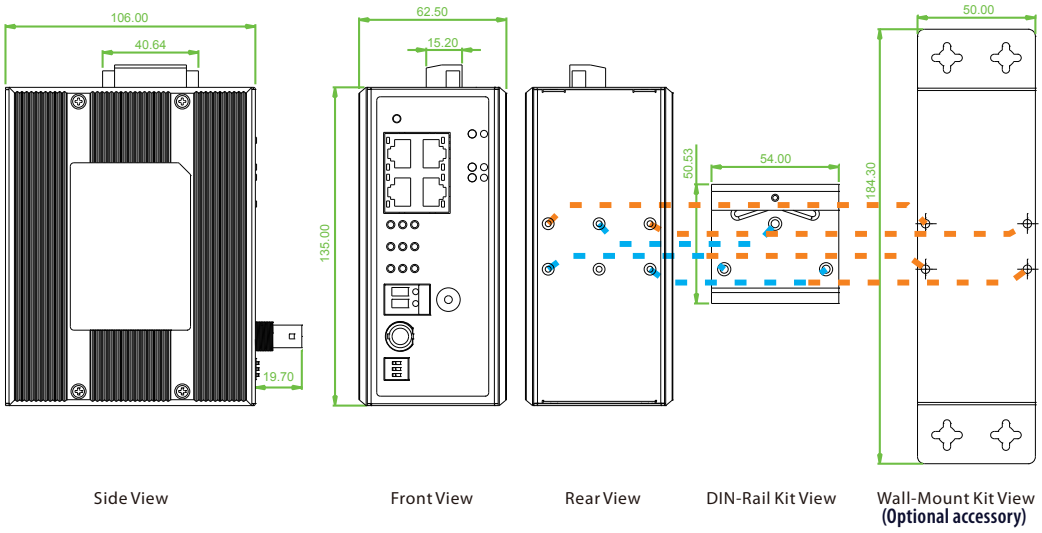


Figure 2 : Remote Power feeding Disable



Dimensions



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Specifications & design are subject to change without prior notice. Please visit CTC Union website for more details.

Ordering Information

Model Name	UTP	Long Distance		PoE Port	Certifiifaction		
	10/100	RJ11	Coaxial	IEEE 802.3at	Safty EN60950-1	CE	FCC
IEXT224-4PH	4	1	1	4	V	V	V

Package List

- One device of the series (1 IEXT-224-4PH-L for local unit, and 1 IEXT-224-4PH-R for remote unit)
- Quick installation guide
- Din Rail with screws
- Terminal block

Optional Accessories

Industrial Power Supply

NDR-120-48	Industrial Power, Input 90 ~ 264VAC / 127 ~ 370VDC, Output 48 VDC, 120W, -20 ~ +70°C

Wall mount kit

IND-WMK02	Wall Mount kit for Industrial product (Wide) (184 x 50mm)