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IEXT101-P2W & IEXT101C-P2W

2 Wire, Long Reach Ethernet & PoE Extender
Coaxial, Long Reach Ethernet & PoE Extender

NEW

- *Transmission and Remote Power Feeding up to 500 meter via 2 wire UTP or coaxial cable*
- *4KV Surge Protection for PoE, UTP or coaxial cable*
- *Wide Operating Temperature Range, -20~75°C, for Use in Harsh Environments*
- *EN50121-4, EN61000-6-2, EN61000-6-4, CE and FCC Certified*

IEXT101-P2W　　IEXT101C-P2W

Industrial-grade PoE extenders IEXT101-P2W and IEXT101C-P2W extend Ethernet transmission distance and IEEE802.3af/at PoE+ output beyond the 100-meter limit of standard Ethernet. Paired devices, local and remote unit, operate in a point-to-point topology over 2-wires RJ-11 unshielded cable or Coaxial cable. The remote unit is powered by the local unit and is then able to provide PoE output for standard or passive applications. This is the ideal solution to solve the problem of no electricity and save costs, it is designed for harsh environments and can be used in Industrial networks, traffic monitoring, safety automation applications and urban security, smart transportation systems. It is also suitable for many military or utility market applications where environmental conditions exceed commercial product specifications.

Features

- Long distance data transmission and remote power feeding up to 500 meter via 2 wire UTP or Coaxial cable (See Figure 1 and Figure 2)
- Supports standard IEEE802.3af/at or passive PoE devices
- Eliminates the need for any power supply at the remote side
- Quick deployment and easy maintenance

Specifications

Standard	IEEE 802.3	10Base-T	
	IEEE 802.3u	100Base-TX	
	IEEE 802.3af	PoE	
	IEEE 802.3at	PoE+	
Hardware Interfaces	IEXT101-P2W 2 Wire UTP Type	IEXT101-P2W-L (Local unit)	2-pin Terminal block for power input connector
			1x RJ45 for LAN 10/100Base-TX Ethernet port
			1x RJ11 (2wire UTP) for delivery power to remote unit, and communication data between Local and remote unit.
			The 2 wire UTP maximum distance is up to 500 meter.
		IEXT101-P2W-R (Remote unit)	1x RJ45 for LAN 10/100Base-TX Ethernet and PoE PSE
			1 RJ11 (2 wire UTP) for receive power from local unit, and communication data between local and remote unit.
			The 2 wire UTP maximum distance is up to 500 meter.
	IEXT101C-P2W BNC Coaxial Type	EXT101C-P2W-L (Local unit)	2-pin Terminal block for power input connector
			1x RJ45 for LAN 10/100Base-TX Ethernet port
			1x BNC (Coaxial cable) for delivery power to remote unit, and communication data between local and remote unit.
			The coaxial cable maximum distance is up to 500 meter.
		IEXT101C-P2W-R (Remote unit)	1x RJ45 for LAN 10/100Base-TX Ethernet and PoE PSE
			1x BNC (Coaxial cable) for receive power from local unit, and communication data between local and remote unit.
			The coaxial cable maximum distance is up to 500 meter.

Industrial Ethernet & PoE Extender

Cable	LAN cable	Above Cat. 5e UTP or STP 4 wire cable. The maximum distance is up to 100 meter.	
	Extension port	Cable : 1x RJ11 (2wire), above 24AWG. (IEXT101-P2W 2 wire UTP type) The maximum distance is up to 500 meter.	
	Extension port	1x BNC Coaxial, (IEXT101C-P2W) The maximum distance is up to 500 meter.	
LED	IEXT101-P2W 2 wire UTP Type	IEXT101-P2W-L (Local unit)	Power (Green) LAN Link/Active (Green) Line Speed/Link Active: 10M (Amber), 100M (Green)
		IEXT101-P2W-R (Remote unit)	Power (Green) LAN Link/Active (Green) Line Speed/Link Active: 10M (Amber), 100M (Green)
	IEXT101C-P2W BNC Coaxial Type	IEXT101C-P2W-L (Local unit)	Power (Green) LAN Link/Active (Green) Line Speed/Link Active: 10M (Amber), 100M (Green)
		IEXT101C-P2W-R (Remote unit)	Power (Green) LAN Link/Active (Green) Line Speed/Link Active: 10M (Amber), 100M (Green)
Data rate	The line speed between Local unit and Remote unit will be 10M or 100M that depend on extension length that will be auto negotiation.		
	The LAN speed is same with line speed (extension port). (Please ref Figure 1 and Figure 2)		
Operating Temperature	-20 ~ 75°C		
Storage Temperature	-40 ~ 85°C		
Humidity	10% - 95% (non-condensing)		
Power Supply	55~57VDC Input power (2pin Removable Terminal Block)		
Power Consumption	TBD		
Housing	Rugged Metal, IP30 Protection and fanless		
Dimensions	102.5 x 52 x 25mm (D x W x H)		
Weight	TBD		
Installation Mounting	Wall Mounting		
MTBF	TBD (MIL-HDBK-217)		
Certification			
EMC	CE (EN55032, EN55035)		
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		
4KV Surge Protection	Supported for PoE, UTP		
Shock	IEC 60068-2-27		
Freefall	IEC 60068-2-31		
Vibration	IEC 60068-2-6		

14 Application

Figure1 : PoE Extending Solution for IP Surveillance Systems

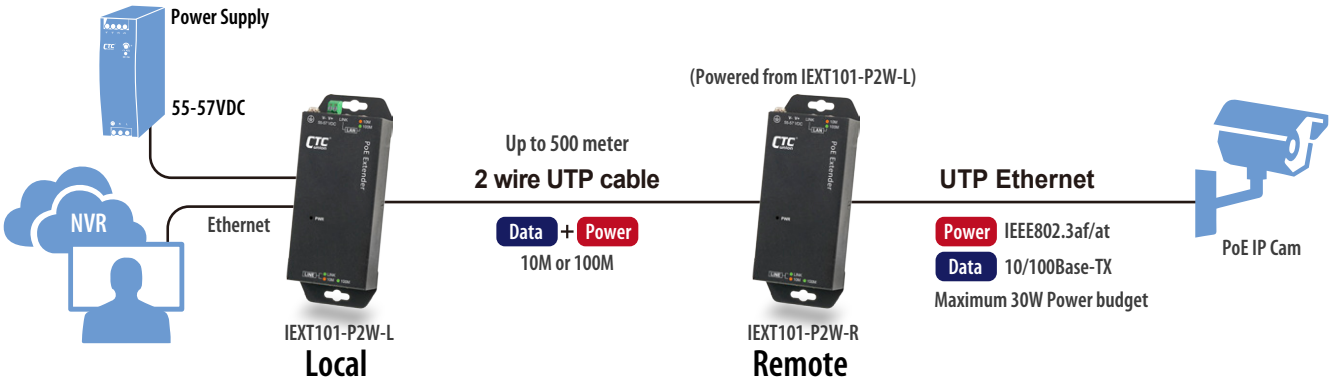
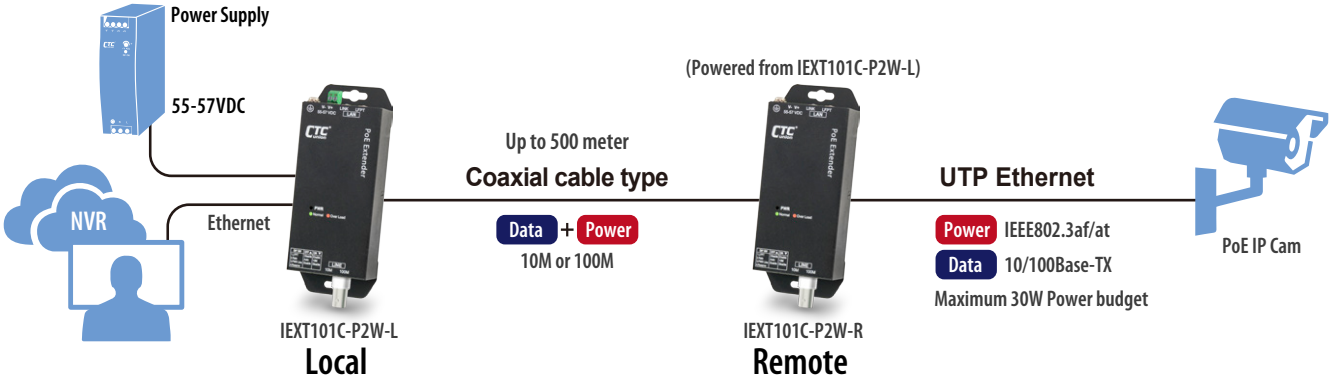
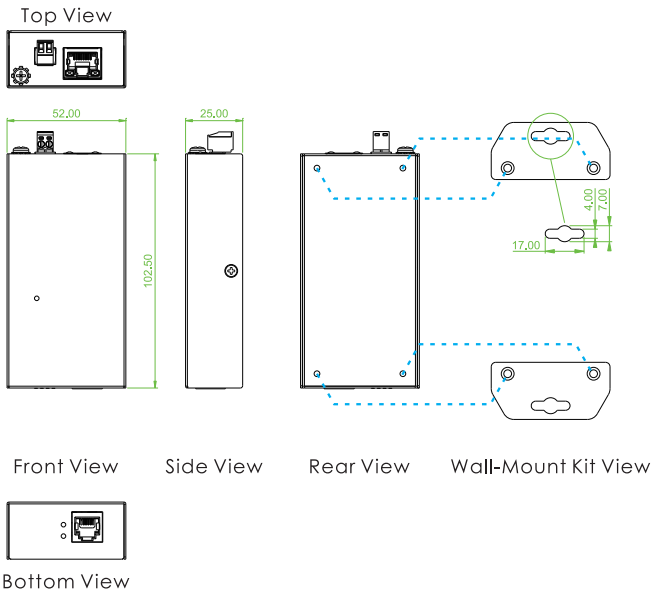


Figure2 : PoE Extending Solution for IP Surveillance Systems

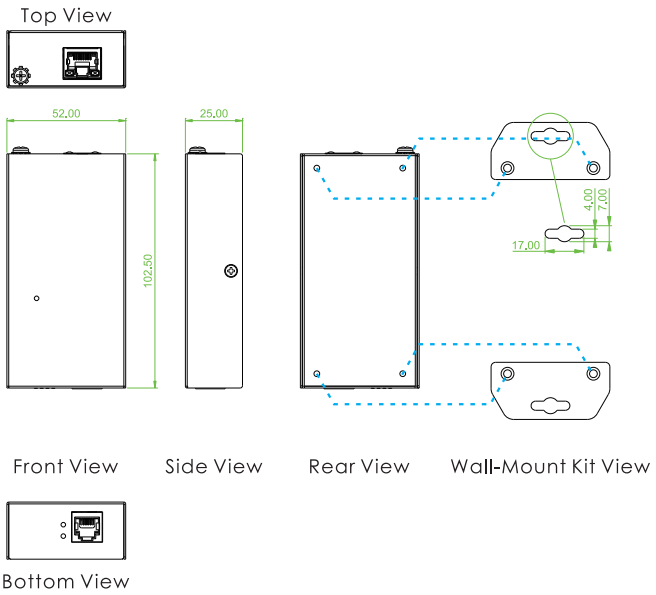


Dimensions

IEXT101-P2W-L

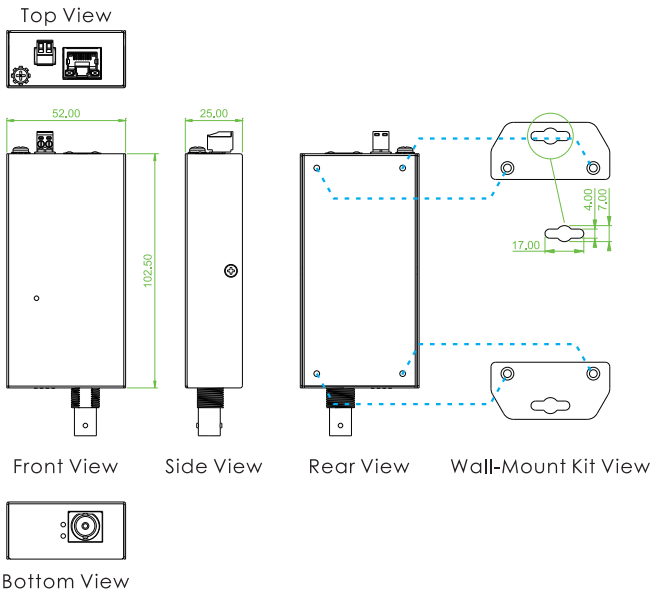


IEXT101-P2W-R

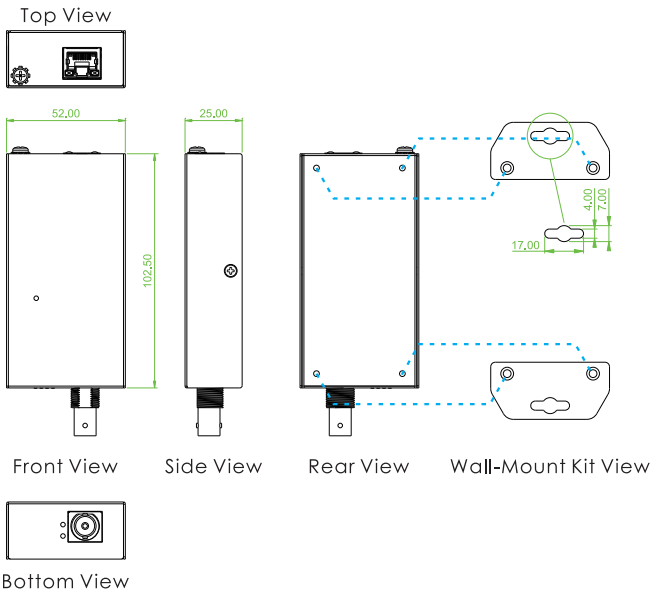


Industrial Ethernet & PoE Extender

IEXT101C-P2W-L



IEXT101C-P2W-R



Ordering Information

Model Name	Ethernet port RJ45 (Local Unit)	Line extension port RJ11	Ethernet port RJ45 (Remote Unit)		Inpu Power	Certification		
	10/100 Base-TX	10/100M (Up to 500meter)	10/100Base-TX	Power Budget for PD		Railway EN50121-4	EN61000-6-2 EN61000-6-4	CE FCC
IEXT101-P2W-L	1	1			55~57VDC	V	V	V
IEXT101-P2W-R		1	1	5W-30W	Powered from IEXT101-P2W-L	V	V	V

Model Name	Ethernet port RJ45 (Local Unit)	Line extension port BNC	Ethernet port RJ45 (Remote Unit)		Inpu Power	Certification		
	10/100 Base-TX	10/100M (Up to 500meter)	10/100Base-TX	Power Budget for PD		Railway EN50121-4	EN61000-6-2 EN61000-6-4	CE FCC
IEXT101C-P2W-L	1	1			55~57VDC	V	V	V
IEXT101C-P2W-R		1	1	5W-30W	Powered from IEXT101C-P2W-L	V	V	V

Optional Accessories

■ Industrial Power Supply

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

Note: Please adjust the NDR-120-48 output voltage to 55~57VDC for better performance.