IEXT101

Long Reach Ethernet Extender

NEW

- Data transmission up to 800 meters
- 4KV surge protection for UTP
- Wide operating temperature range, -40~75°C, for use in harsh environments

CE FC

CTC's Industrial Grade Ethernet Extender can extend data beyond the standard 100 meters limitation of standard Ethernet. The paired units work in a point-to-point topology over 1 or 2 pair unshielded twisted pair (UTP) cabling up to 800 meters.

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 or utility market applications where environmental conditions exceed commercial product specifications.

Features

- Long distance data transmission up to 800 meter on 1/2 pair UTP cable (see figure 1)
- Quick deployment and easy maintenance

Specifications

Hardware Standard Interfaces	IEEE 802.3	10Base-T
	IEEE 802.3u	100Base-TX

Network Connector	2 pin Terminal Block for power input connector 1 RJ45 for LAN 10/100Base-TX Ethernet port 1 RJ-45 for extension distance and communication data to remote unit

Dip Switch	SW 1 : Link Fault Pass Through (LFPT)	Off: Disable On: Enable
	SW 2 : Line Speed	Off: Auto On: 10M

LED	Power (Green) LFPT (Amber) LAN Link active (Green) Line Speed/Link active 10M(Amber), 100M(Green)

Data rate	The line speed between 2 IEXT101 will be 10M or 100M that depend on extension length or set by DIP SW. (Please ref figure 1)

Cable	1 or 2 pair UTP cable Cat.5e, Cat. 6 (See Table 1 for Transmitting rate by difference length) (Please ref figure 1)

Operating Temperature	-40°C to 75°C
Storage Temperature	-40°C to 85°C
Humidity	10% - 95% (non-condensing)
Power Supply	12/24/48VDC (9.6~60VDC) Input power (2pin Removable Terminal Block)
Power Consumption	< 3W
Housing	Rugged Metal, IP30 Protection and fanless
Dimensions	102.5 x 52 x 25 mm (D x W x H)
Weight	170g
Installation Mounting	Wall Mounting
MTBF	2,016,859 Hours (MIL-HDBK-217)

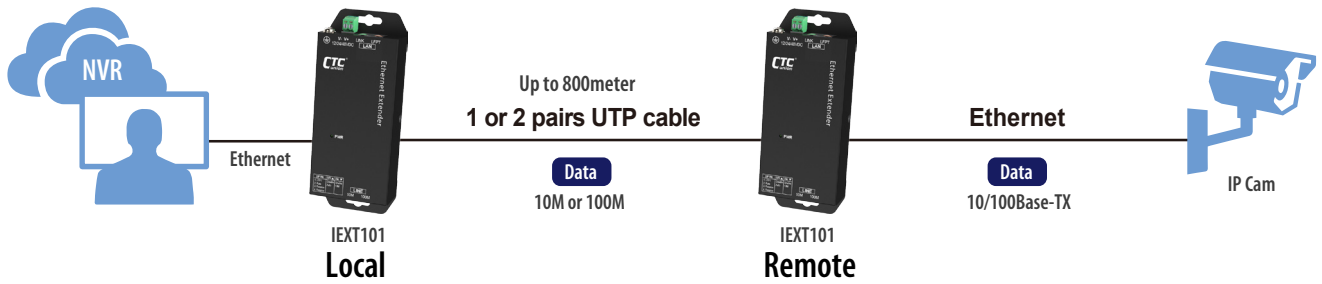| Certification	
EMC	CE (EN55032, EN55035)
EMI (Electromagnetic Interference)	FCC Part 15 Subpart B Class A,CE
EMS (Electromagnetic Susceptibility) Protection Level	EN61000-4-2 (ESD) Level 3, Criteria B EN61000-4-3 (RS) Level 3, Criteria A EN61000-4-4 (Burst) Level 3, Criteria A EN61000-4-5 (Surge) Level 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 UTP
Shock	IEC 60068-2-27
Freefall	IEC 60068-2-31
Vibration	IEC 60068-2-6

Extension Distance vs speed

Cat5e /Cat6 UTP cable

Extension Distance (Meter)	Link speed (Mbps)	
	2 pairs	1 pairs
100	100	100
200	100	100
300	100	100
400	100	10
500	100	10
600	100	10
700	10	10
800	10	10

Specifications & design are subject to change without prior notice. Please visit CTC Union website for more details. www.ctcu.com / sales@ctcu.com

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Application

▶ Figure1 : Long distance data transmission application

NVR			
	Ethernet	Up to 800meter **1 or 2 pairs UTP cable**	Ethernet
		Data 10M or 100M	Data 10/100Base-TX
	IEXT101 **Local**		IEXT101 **Remote**

IP Cam

Dimensions

Front View   Side View   Rear View   Wall-Mount Kit View
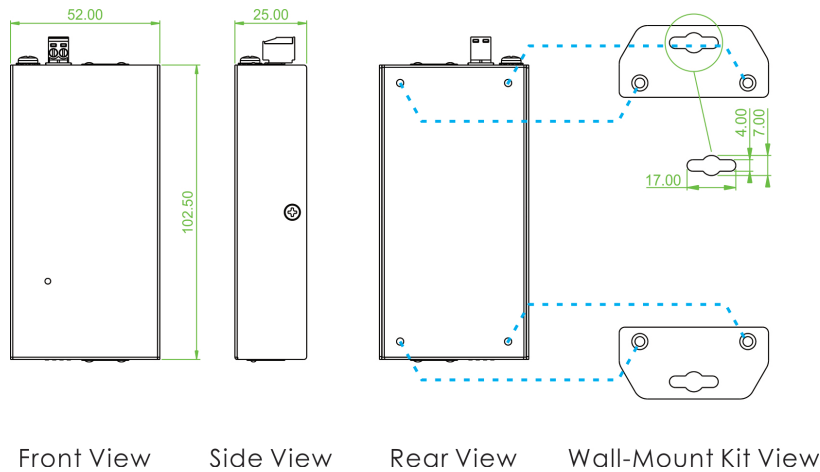
Ordering Information

Model Name	Ethernet Port	Line Port (Extension port)	Power input	Certification	
	10/100 Base-TX	10/100M (Upto 800meter)		CE	FCC
IEXT101	1	1	12/24/48VDC	V	V

■ **Package List**

- 1 IEXT101 device
- 2 pin terminal block
- 2 pcs wall mount bracket and screw

Note: IEXT101 are individually packaged and sold. A complete link requires two IEXT101 units.

Optional Accessories
■ Industrial Power Supply

MDR-20-24	Industrial Power, Input 85~264VAC/120~370VDC, Output 48 VDC, 24W, -20 ~ +70℃

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