

QUESTTEL

Broadcast Systems

10/100M Dual Fiber Media Converter

L-100IP-TRX

User Manual



Description

QuestTel series Ethernet media converter can interconvert electrical signals of 10Base-T and 100Base-TX twisted pairs with optical signals of 100Base-FX. It extends the network transmission distance from 100m to 80km(declare before order) via fiber optical cable. It enables the data to transmit in two different mediums of electrical and optical networks either by the technology of data link L2 store-and-forward, or by the one of PHY L1 cut-through. It supports transmission in multi-mode single fiber, single-mode single fiber.

Features

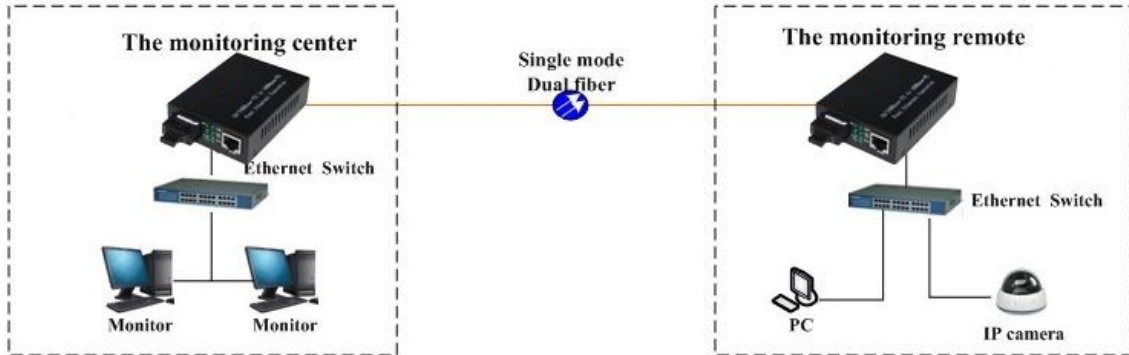
- 10/100Mbps auto-sensed, facilitating network upgrade**
- Built-in efficient switching core to implement flow control and reduce broadcast packets**
- full-duplex and half-duplex auto-sensed**
- Supporting automatic cross connection of twisted pair interfaces, facilitating system commissioning and installation**
- Supporting Link Failure Alert (LFA) with optional dip-switch(unique)**
- Supporting 10/100Mbps store-and-forward and 100Mbps cut-through transmission with optional dip-switch(unique)**
- Supporting the transmission of extra-long packets up to 1600 bytes**
- Supporting the transmission of extra-long VLAN packets**
- Supporting Quality of Service (QoS) , ensuring the transmission of VoIP packets**
- Supporting STP to form a redundant network**
- Extremely low power consumption, low heat, stable performance and long lifetime**

Technical Datasheet

TECHINCAL SPECIFICATIONS

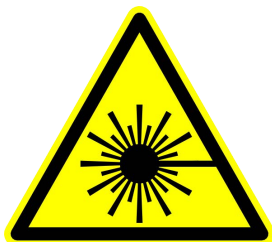
Parameter	Specifications	
Standard Protocol	IEEE802.3 100Base-T , IEEE802.3u	
	100Base-TX/FX Fast Ethernet,IEEE802.3x Flow control	
	IEEE802.1q VLAN,IEEE802.1p QoS,IEEE802.1d Spanning Tree	
Band Width	RJ 45 Port: 10/100Mbps	
Switching	Support Store & Forward	
Operation Mode	Full /Half duplex mode	
Connectors	UTP: RJ-45	Fiber connector: SC/UPC
Operation Mode	Full /Half duplex mode	
LED Indicators	POWER, FPL,10/100, FRX, TRX , FDX.	
Power Supply	Internal	AC100-240V/50~60Hz
		DC 5V 1.2A
	Output Voltage	uncertainty $\pm 3\%$ (without load)
	Output Voltage:	Continuous current $\geq 90\%$ nominal current; $\pm 5\%$ nominal DC Voltage; $V_{pp} \leq 150mV$
	Voltage surge protection	Intergrates the voltage surge protection (arrester) equipment.
Environmental Parameters	Work Temperature	-5°C~+55°C
	Storage Temperature	-40°C~70°C
	Humidity	5%~90% non-condensing
TP Cable	Cat5 UTP cable (the max distance up to 100m)	
Fiber Cable	Single Mode	
Size	94mm*70mm*25mm(L*W*H) (External power supply)	

Application Drawing



LED INDICATORS

LED indicator lamp	Status	Explanation
FX Link/Act	On	Connection status display for fiber link. "ON" indicates that Fiber link is in correct connection.
	Blink	Active status display of fiber link "Blink" indicates packet goes through Fx end.
TP Link/Act	On	Connection status display for electric link. "ON" indicates that electric link is in correct connection.
	Blink	Active status display of electric link "Blink" indicates packet goes through Tx end.
DUP	On	Transceiver works in the full duplex mode.
	Off	Transceiver works in the half duplex mode.
PWR	On	Power is on and normal.
SD	On	Fiber signal is detected.
1000	On	Transfer rate of electric interface is 1000Mbps.
	Off	Rate of electric interface is 1000Mbps



WARNING!

This unit outputs continuous invisible light, which may be harmful to the eyes; use with caution. For additional safety, plug the attached dust caps into the optical transceivers when the fiber optic cable is unplugged. Direct viewing into optical connectors should be avoided at all times!