

FC650A Fiber Converter Media Series

Overview

HiOSO Ficom FC650A is a kind of 10/100Mbps adaptive fast Ethernet fiber media converter (also called optical-to-electric medium converter) with a built-in four-port 10M/100Mbps adaptive switch, which can implement mutual conversion between four independent 10Base-T/100Base-TX twisted pair electrical signal and 100Base-FX optical signal. FC650A can extend the transmission distance of a network from 100m over copper wires to 120Km (single-mode full-duplex mode). This type of fiber converter supports two types of network connection medium: 10/100Base-TX and 100Base-FX. With the application of the switching technology and the storing & forwarding technology, FC650A can implement data transmission between two types of network connection medium. This kind of converter supports transmission in dual-fiber multi-mode, dual-fiber single-mode and single-fiber single-mode fibers.

Features

- Adaptive 10Mbps and 100Mbps Ethernet network, for the convenience of network upgrading;
- Efficient built-in switching core, to implement flow control and reduce broadcast packets;
- Providing four independent 10/100Mbps adaptive switching-type twisted pair ports, to implement electrical interface backup and multi-user access;
- Providing four electrical interfaces based on VLAN switch setting, and supporting the connection of users from different units;
- Supporting full-duplex and half-duplex transmission modes and capable of automatic negotiation;
- Supporting automatic crossing of twisted pair ports, for the convenience of system debugging and installation;
- Supporting the transmission of extra-long packets (with the maximum length of 1552 bytes);
- Supporting Quality of Service (QoS) and ensuring transmission of VoIP packets;
- Supporting Spanning Tree Protocol (STP) to form a redundant network;
- Low power consumption, low heat and capable of stable operation for a long period time;
- Supporting multiple types of fiber ports such as dual-fiber multi-mode、 dual-fiber single-mode and single-fiber single-mode, expanding the requirements of users;

Application

10/100Mbps fast Ethernet long-distance transmission network

Pictures



Technical Specifications

Parameter	Specifications
Access mode	10/100Mbps
Standard	IEEE802.3 10Base-T Ethernet, IEEE802.3u, 100Base-TX/FX Fast Ethernet, IEEE802.3x Flow control, IEEE802.1q VLAN, IEEE802.1p QoS, IEEE802.1d Spanning Tree
Wavelength	850nm/1310nm/1550nm
Transmission distance	Dual-fiber multi-mode: 2Km; Dual-fiber single-mode: 25/40/60/80/100/120Km; Single-fiber single-mode: 25/40/60/80/100Km Category-5 twisted pair: 100m
Port	Four RJ45 connector: connected to STP/UTP category-5 twisted pair One fiber port: Multi-mode - SC or ST (fiber size: 50,62.5/125μm) Single mode - SC/FC fiber port (fiber size: 9/125μm) Single-fiber single-mode - SC/FC fiber port (fiber size: 9/125μm)
Conversion mode	Medium conversion, storing and forwarding
MAC address table	1 K
Buffer space	1Mbit
Flow control	Full duplex state: flow control; half duplex state: back pressure mode
Delay	9.6us

Bit error rate	<1/1000000000
MTBF	100,000 hours
LED	POWER (power), FX LINK/ACT (fiber connection/action) FDX (FX full duplex mode), FX100 (Fiber, with a transmission rate of 100M) TP1/2/3/4 LINK/ACT (1/2/3/4-port twisted pairs connection action) TP1/2/3/4100 (1/2/3/4-port twisted pairs, with a transmission rate of 100M)
Power	DC5V/1A (external)
Power consumption	3.5W
Operating temperature	-10~55°C
Operating humidity	5%~90%
Storage temperature	-40~70°C
Storage humidity	5%~90% (non-condensing)
Dimensions	26mm(Height)*70mm(Width)*98mm(Depth) (external power)

Ordering Information

Model	Rate (Mbps)	Mode	Working Wavelength (nm)	Transmission Distance (Km)	Fiber Interface	Power
FC650AM-SC/ST	10/100	Dual-fiber multi-mode	1310	2	SC/ST	External DC5V/1A
FC650AS20/40/60 -SC/FC	10/100	Dual-fiber single-mode	1310	25/40/60	SC/FC	External DC5V/1A
FC650AS80/100/120-SC/FC	10/100	Dual-fiber single-mode	1550	80/100/120	SC/FC	External DC5V/1A
FC650ASS20/40/60-SC	10/100	Single-fiber single-mode	1310/1550	25/40/60	SC	External DC5V/1A
FC650ASS80/100-SC	10/100	Single-fiber single-mode	1310/1550	80/100	SC	External DC5V/1A