

FC690A 8 electrical interfaces Fiber Media Converters

Overview

HiOSO Ficom FC690A is a kind of 10/100Mbps adaptive fast Ethernet fiber media converter (also called optical-to-electric medium converter) with a built-in eight-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. FC690A can extend the transmission distance of a network from 100m over copper wires to 120 Km (single-mode full-duplex mode). It supports two different types of network connection medium types: 10/100Base-TX and 100Base-FX. With the application of the switching technology and the storing & forwarding technology, FC690A can implement data transmission between the two types of network connection media. 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 environments, for the convenience of network upgrade;
- Efficient built-in switching core, to implement flow control and reduce broadcast packets;
- Providing eight independent 10/100Mbps adaptive switching-type twisted pair ports, to implement electrical interface backup and multi-user access;
- Providing eight 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 | Eight RJ45 interfaces: 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 mode |
| 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) TP1/2/3/4/5/6/7/8 LINK/ACT (1/2/3/4/5/6/7/8-port twisted pairs connection action) TP1/2/3/4/5/6/7/8 100 (1/2/3/4/5/6/7/8-port twisted pairs, with a transmission rate of 100M) |
| Power | DC5V/1A (external) |
| Power consumption | 5W |
| Operating temperature | -10~55℃ |
| Operating humidity | 5%~90% |
| Storage temperature | -40~70℃ |
| Storage humidity | 5%~90% (non-condensing) |
| Dimensions | 38mm(Height)*118mm(Width)*152mm(Depth) (external power) |

Ordering Information

| Model | Rate (Mbps) | Mode | Working Wavelength (nm) | Transmission Distance (Km) | Fiber Interface | Power |
|-------------------------|-------------|--------------------------|-------------------------|----------------------------|-----------------|------------------|
| FC690AM-SC/ST | 10/100 | Dual-fiber multi-mode | 1310 | 2 | SC/ST | External DC5V/1A |
| FC690AS20/40/60 -SC/FC | 10/100 | Dual-fiber single-mode | 1310 | 25/40/60 | SC/FC | External DC5V/1A |
| FC690AS80/100/120-SC/FC | 10/100 | Dual-fiber single-mode | 1310 | 80/100/120 | SC/FC | External DC5V/1A |
| FC690ASS20/40/60-SC | 10/100 | Single-fiber single-mode | 1310/1550 | 25/40/60 | SC | External DC5V/1A |
| FC690ASS80/100/120-SC | 10/100 | Single-fiber single-mode | 1310/1550 | 80/100/120 | SC | External DC5V/1A |