



FTTH (Fiber to the Home)

POF (Plastic Optical Fiber)

Network Solution

COMOSS ELECTRONIC CO., LTD.
4F, No. 11, CHUNG-HSIN ST., SHULIN 238, TAIWAN, R.O.C.

1. Introduce

With COMOSS POF (Plastic Optical Fiber) products, users can easily build an optical home network themselves. And realize a fully optical connection to your network devices. Feature of High bandwidth, low EMI affect, beautiful, high reliability, easy DIY etc. The POF products including USB POF Adaptor, PCI POF Card, POF to Ethernet Media Converter and POF Switch Hub. Using Optolock and Optolup technology, people can combine with IPTV and FTTX. It is the best solution for future network.



POF Network

Optolock

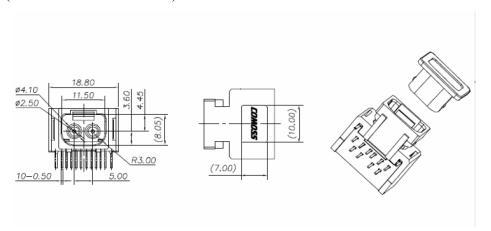






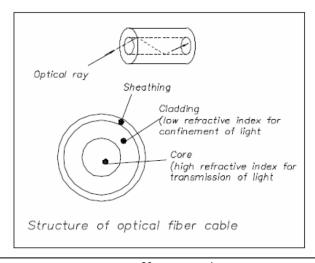
A POF transceiver which is RCLED-based 650 nm fiber optic solution designed to provide a Fast Ethernet communication link over POF. The RCLEDs provide high levels of light coupling into the fiber, with short rise and fall times, enabling Ethernet-compliant signaling over large core POF. The simple termination system in the transceiver and the flexibility of POF reduces installation costs to a minimum. OptolockTM is a trademark of Firecomms.

SMI (Small Multi-media Interface)



SMI (Small Multimedia Interface), is a whole new connection technology, carrying signals meet IEEE1394 standards. The physical transferring media is chosen as POF (Plastic Optical Fiber), for consideration of low-cost and short distance transferring (50M). With the reliable mechanism structure, end-users can push or pull SMI Patch Cord easily, and have no risk of damaging SMI Transceiver itself. Every aspect shows the unique design of SMI interface and it would be no doubt becoming the mainstream in near future.

Optolup







A Polymer Optical fiber (POF) that suitable for OptolockTM applications. The OptoLupTM cable consists of two parts, the core in the center and the cladding at the outer layer, and then an overall sheathing jacket. (The illustration of the optical fiber cable) OptoLupTM is a kind of APF (All-plastic fiber), both the core and the cladding are made of plastic. Among of which, the refractive index of the core is higher than the cladding, so that when an optical ray is transmitted at an angle into the cable, the optical ray can be reflected back at the boundary between the core and the cladding for the transmitting.

2. Key Features

- (1) Fully comply with IEEE 802.3u, 10/100Base-TX and 100Base-FX
- (2) Support 10/100Base-TX RJ-45 port and 100Base-FX POF interface
- Pass all packets without address and CRC check
- Supports modified cut-through frame forwarding for low latency
- Supports pure converter mode data forwarding for extreme low latency
- Supports flow control for full and half duplex operation
- Bandwidth control
- Forward 1600 bytes packet for management
- Optional forward fragments
- (3) Feature
- High Bandwidth
- Low EMI
- Easy Set Up
- High reliability
- Beautiful
- Low cost

3. POF Products

POF PCI Card

FEPCI-X1X is designed for use in a variety of applications including workstation NICs, PC motherboards, and other systems utilizing a PCI bus that require network connectivity to an Ethernet or Fast Ethernet LAN.



POF USB Adaptor

FEUSB-X1X is a high performance and integrated highly ASIC which enables low cost, small form factor, and simple plug-and-play Fast Ethernet network connection capability for desktops, notebook PC's, Ultra-Mobile PC's, docking stations, game consoles, digital-home appliances, and any embedded system using a standard USB port.



POF Media Converter

Media Converter is a fast ethernet to POF converter. With high performance data transmit and easy installation, and the FECON-X1X series can building a network solution of FTTH (Fiber to The Home) and small office network environment from enterprise.



POF Switch Hub





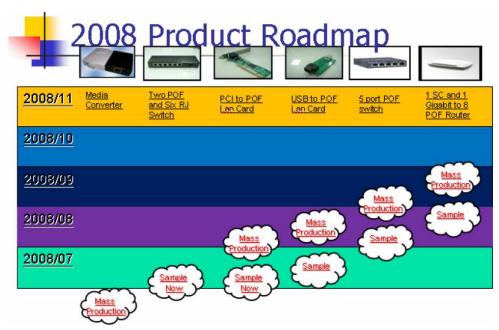
With concept of "Easy to Install and use", "Compact-sized design", and "Simple troubleshooting", COMOSS PSW-X1X provides cost-conscious business and home users with the foundation of an integrated system of small-office / home-office networking.



4. POF Application

- (1) Home network
- (2) Surveillance system
- (3) Military
- (4) IPTV
- (5) Multi-media
- (6) Car network

5. Product roadmap



COMOSS has developed a series of products including IDB1394 POF transceivers, SMI POF transceivers, Optolock POF transceivers, POF patch cords and various of POF products. If there is any





product needed, please contact with our Web- site (www.comoss.com). We can also design these products with our customer.