

# Plastic Optical Fiber

The Advanced Alternative  
for Home Networks

See **Red.**



Mitsubishi International  
Corporation

  
**Firecomms**<sup>™</sup>

[www.pofnetworks.com](http://www.pofnetworks.com)

# Plastic Optical Fiber

## The Advanced Alternative for Home Networks

Plastic Optical Fiber, known as POF, offers all the advantages of optical fiber without any of the challenges. Already an established medium in industrial and automobile networks due to its high reliability in even the most rugged environments, POF has found another niche in home networks. With data rates of up to one Gigabit, POF is a robust technology for high-speed Optical Ethernet and Optical FireWire (including HANA) in the home. These features of POF are especially advantageous for emerging IPTV implementations and other triple play services.

POF provides numerous advantages over pre-existing home network transmission media, including CAT5/CAT6, coax, phone line and power line. This means that home builders, installers, content providers, and consumers can benefit from quicker, more flexible and cost-effective installations by utilizing POF as a replacement solution, or as an effective complementary solution to extend connectivity to locations not served by existing wiring.

### Quick and Easy to Install

POF can be deployed by a professional or do-it-yourself installer using basic tools and inexpensive plastic connectors, like Firecomm's OptoLock® POF port or connectors from Electronic Links, Molex and Comoss. This "garden hose" connectivity makes installation quicker and more-effective than other home network technologies.



OptoLock®

### Immunity to Electrical Noise

Because it's optical, plastic fiber is completely immune to electrical noise. That means existing copper wiring will not interfere with data passing

through POF so it can even be installed next to electrical cabling. This is very important for multimedia data transmission, in which the quality of the signal could be negatively impacted by external noise.

### High Bandwidth

POF offers data rates of up to one Gigabit, and assured quality of service to every device in the residence. This makes POF a robust technology for high-speed Optical Ethernet and Optical FireWire (including HANA) in the home.

### Small and Unobtrusive

At the ultra-thin diameter of 1.5 mm and 2.2 mm, POF can be easily deployed in new construction or retrofit installations either inside wall cavities or outside the wall—along baseboards, under carpets, or anywhere cable is typically run.

### Simple Design

POF is ideal for architects and office/home designers as one cable supplies all the network media needs. It can be used for point-to-point links with support for low-cost repeaters that extend links and daisy-chains from room to room.

### Quick Troubleshooting with Visible Light

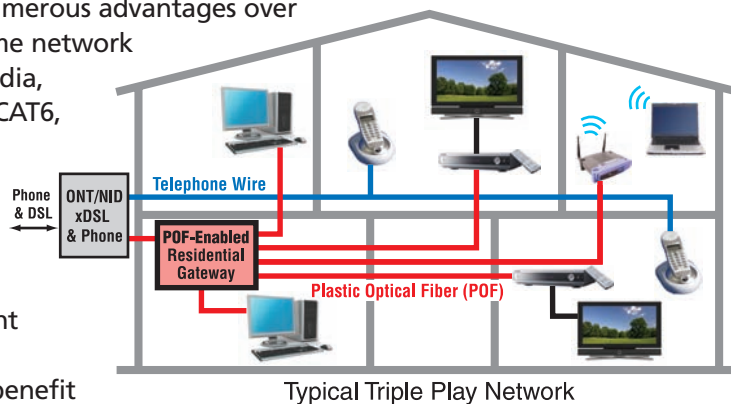
Troubleshooting is quick and easy as POF uses a visible eye-safe red light to transfer data from one device to another. In fact, it's the only interconnect technology where the signal can be seen at both ends. A quick glance inside the cable will indicate connectivity to the network—a red light seen by the human eye means the network is connected. It's that simple.

### Cost Effective

POF, connectors, and fiber optic transceivers are low-cost consumer parts—ideal for installers who save on cable costs and installation, testing and maintenance time.

### Widely Used

Used in over 20 million cars for infotainment networks, POF is the global standard for high speed in-car networks.



See Red.