



Home Networking Solutions



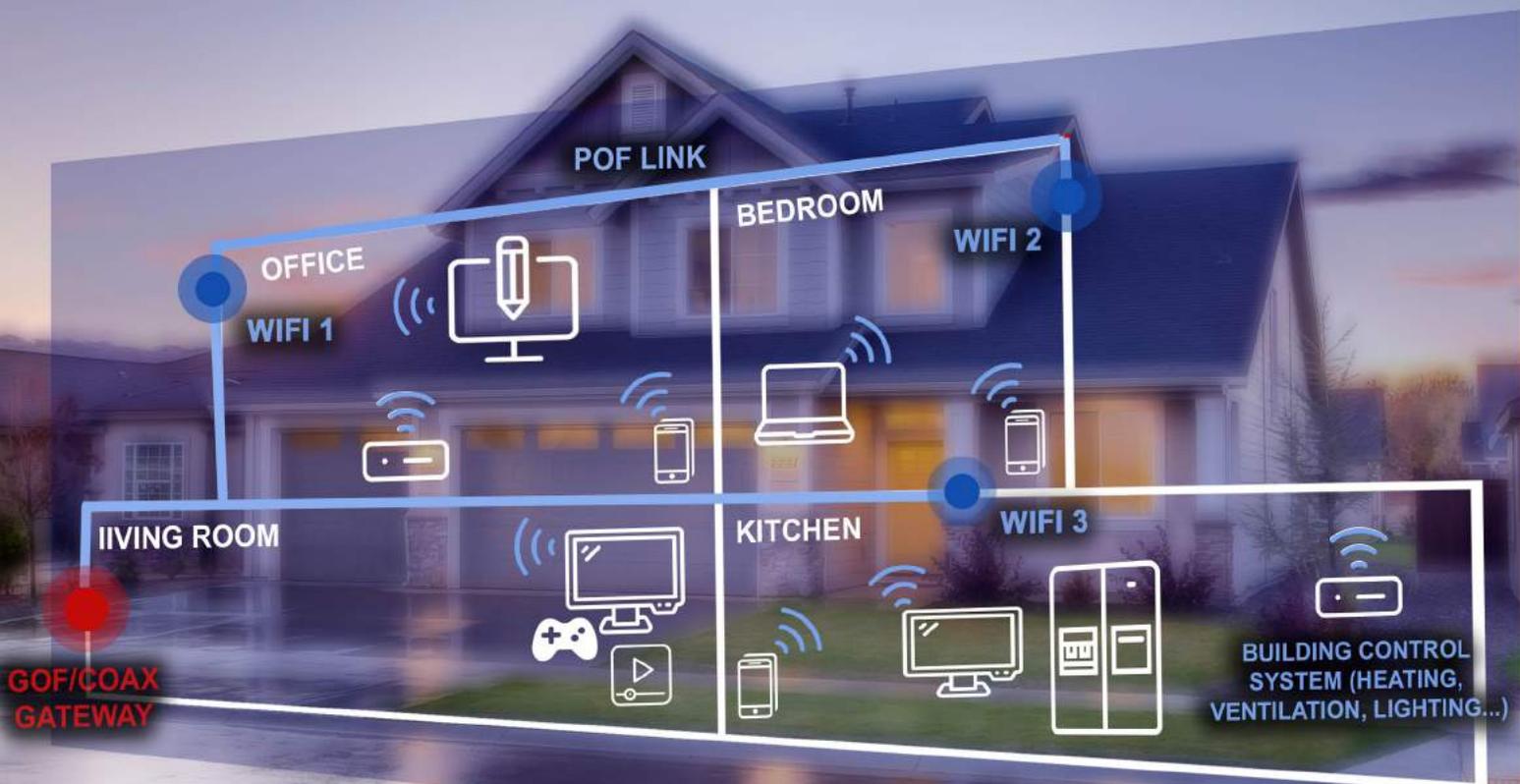
Firecomms fiber optic solutions are ideal for high-bandwidth triple play networks that require Ethernet data to be transmitted across the home network. Together with Plastic Optical Fiber (POF), Firecomms' fiber optic transceivers enable quicker, more flexible and cost-effective installations — unique advantage for home builders, installers, content providers, and consumers alike.



High-Bandwidth Optical Solutions for Home Networking

Firecomms products with Plastic Optical Fiber (POF) links offer many advantages in high speed, consumer applications:

- *EMI/RFI immunity ideal for locating links alongside electrical cabling without interference*
- *Galvanic isolation between transmitter and receiver to protect expensive equipment from lightning or electrical shocks*
- *Visible spectrum operation enables eye-safe, connection detection and fast troubleshooting*
- *Low power consumption, transceivers capable of operation at 250 mW with power-down options to conserve network power when not in use*
- *Durable, flexible and lightweight*
- *Resilient to bending and vibrations*
- *Reduced maintenance cycle time provides up to a 20-year life cycle on transceivers and cables*
- *Simplified field installation does not require expensive tools*
- *Do-it-yourself termination with OptoLock® cut-and-insert simplicity*
- *Gigabit Ethernet over the same fiber*



Anytime, Anywhere Connectivity

Today's home networks have grown in complexity well beyond the traditional modem-to-PC interconnection. The demands placed on the home network bring enormous challenges in enabling a fully connected network of devices and home automation services. When these needs are coupled with the explosive growth of wireless-enabled devices, the home network must provide seamless anytime, anywhere connectivity. Not only must it meet the increasingly complex demands of protecting user information and access, the home network also must be able to deliver high-bandwidth for actual or near real-time services such as live IPTV or on-line gaming.

The need to provide a host of these services across the whole home environment has seen the emergence of powerful wireless, coax or powerline-based solutions. Unfortunately, such "media changing" technologies can fail to operate at full efficiency due to the various external interferences or construction obstacles. An alternative to these solutions is to install a future-proof Ethernet backbone network in the home or to utilize a wired link to install a service in those solutions where other solutions fail to deliver. Plastic Optical Fiber makes an ideal alternative to CAT 5/6 Ethernet cables for the home network in both retrofit and greenfield use cases.

Because optical fiber is immune to electromagnetic interference it makes an ideal backbone or point-to-point link by the ability to co-locate the fiber alongside



the electrical wires which are typically run to every area of the home. Backed by a variety of standards, the plastic fiber industry is implementing solutions to cover both Fast Ethernet and Gigabit connectivity across the same media.

Due to its large core size and material, plastic optical fiber differs from glass-based fibers in that it can be cut with a sharp blade without affecting optical performance.

Firecomms pioneered the development of the OptoLock[®] Ethernet transceiver, which instead of requiring the installer to attach a connector to the cable, simply allows the fiber to be inserted directly into the fiber optic port. Comparable to connecting speakers to a sound system, this combination of Plastic Optical Fiber and Firecomms' OptoLock[®] connector-less transceiver enables 30 second terminations anytime and anywhere.

Firecomms offers a range of fiber optic transceivers in the connector less OptoLock[®] package and the IEC standardized LC termination for alternative socket and connector requirements.



Flexible Solutions from Firecomms

To ensure compatibility and versatility, Firecomms offers a range of devices in OptoLock® or LC packages:

- **The Firecomms media converter may be used wherever it is required to convert Fast Ethernet traffic from copper cables to an optical cable.**

OptoLock®



LC Transceivers



Media Converter

