COMPANY PROFILE

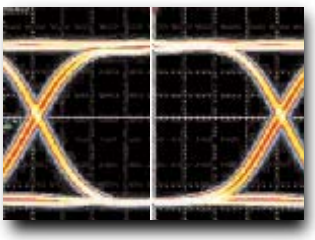
Firecomms is a global leader in optical transceiver sub-assemblies, skillfully combining state-of-the-art compound semiconductor technology with inventive small-scale integration.

Firecomms is the result of a strategic union of applied university research with a solid commercial philosophy. By developing and producing innovative high-speed visible light solutions for the latest communications and sensing applications, Firecomms has quickly become a significant force in photonic communications.

With global headquarters in Ireland, Firecomms leverages the abundant resources of local major research facilities and a highly educated workforce to create its cutting-edge products.

Communications Technology

Firecomms' new Resonant Cavity LEDs (RCLEDs) are designed to push the limits set by traditional Light Emitting Diodes (LEDs) for Plastic Optical Fibre (POF) transceiver applications. While most LEDs designed for high-speed communications peak at speeds of 50Mbps, Firecomms' red 650nm RCLEDs are capable of exceeding 250Mbps.



Firecomms' RCLEDs offer several other advantages over traditional LEDs, including increased power output and outstanding temperature stability. Also, the small device size combined with narrow beam characteristics allows for greater coupling efficiency with low numerical aperture (NA) optical fibres such as Polymer Clad Silica (PCS).

For even greater speed, Firecomms' world-class red 650nm Vertical Cavity Lasers (VCSELs) are capable of exceeding 2 Gbps and have even greater coupling efficiency for low NA fibres.

Sensing and Imaging Technology

With superior brightness, a high-temperature stable peak output wavelength, and three times more fibre-coupled power than traditional LEDs, Firecomms' RCLEDs are ideal for medical and metrology applications.

Firecomms' family of visible VCSELs (Vertical Cavity Surface Emitting Lasers) enable short, low-cost gigabit links, and provide the technology for a new generation of bar code scanners—small enough to build into a phone or a pen. Consuming just one-tenth of the power of a traditional edge-emitting laser, Firecomms VCSELs are ideal for use in handheld bar code scanner applications and mobile display applications.

Integrated Products

Firecomms is a leader in development of IEEE 1394 POF transceivers for use with POF and PCS in automotive, industrial networking, and home networking applications, operating in various environments and speeds between S200 and S1600.

Firecomms' MOST devices are capable of delivering higher power under the stressful conditions of an automobile network and are backward compatible with the current LED style devices.

Firecomms expertise in integrating its small-scale semiconductor devices with custom driver circuitry leads to highly efficient optical sub-assemblies housed in specially designed lens packages.

Firecomms™
Photonic Communications Technology