

APPLICATION NOTE

Reducing the cost of on-site communication at up to 155Mbps when using single-mode fibre for distribution

- Low-cost conversion from single-mode to multi-mode fibre
- Any speed up to 155Mbps
- Removes need for expensive router single-mode interfaces
- Use cheaper multimode fibre cable within buildings
- Easy product installation - absolutely no configuration required



Application Opportunities

Single-mode fibre supports large distances of transmission obviating the need to (expensively) regenerate the signals between the terminal buildings.

Single-mode fibre is ideal for the transmission of higher digital speeds across large corporate, industrial or campus sites, with its high capacity characteristics and its immunity to electrical interference. High capacity routers, ATM switches and even satellite dishes increasingly need to be interconnected by high-speed fibre links within the same site.

Single-mode interfaces on CPE such as routers, are inherently expensive, and it becomes attractive in cost, to use a multimode CPE interface, cheaper multimode cable within the buildings and the Metrodata FC2X00 multimode to single-mode converter.

So, here is a clear opportunity to support the high speed required of fibre connection throughout the Customer Site, whilst minimising the costs and not compromising quality.

[N.B. No copper (CAT5 or coaxial) cabling exists in this application, although Metrodata do have solutions for fibre to copper conversion.]

Typical On-site/campus Applications

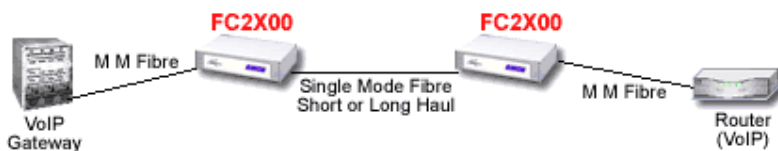
1. Linking a Satellite ground station to distant routers – Internet Service Provision



2. Linking a remote ATM access device to a central office core ATM switch



3. Linking together an IP Voice switch and a remote router



The Metrodata FC2x00 solution

The Metrodata FC2x00 fibre converters provide an excellent level of price/performance for interconnecting on-site high speed communication CPE products via single-mode fibre links, and converting to lower-cost multimode CPE interfaces.

As the demands for on-site communication increase, certainly in the IP arena, fibre cable becomes the attractive solution in capacity, cost and quality. The FC2x00 is designed to need minimal installation in a desk-top or rack situation, and have integral power supply, and so are self-contained – just connect the fibre connectors and power and the FC2x00 transports data at any rate up to 155Mbps.

Two versions of the FC2x00 both cater for Single-mode fibre connection – the FC2000 for shorthaul and the FC2500 for longhaul. [Longhaul, as the description implies, operates over greater distances of single-mode fibre]

The FC2x00 is NOT protocol-sensitive at all, whatever information, at any speed up to 155Mbps, is contained within the lightstream is converted from one –mode to the other. It requires NO configuration and has a single LED for status. The fibre connectors are the standard SC type.

The FC2x00 can be desk-top or rack-mounted. A dual-unit rack adaptor or an 18-unit racknest are available. The FC2x00 has integral mains or –48volt power supply.

The FC2000, and FC2500 are part of a new range of fibre conversion products from Metrodata offering solutions from 2Mbps up to 155Mbps for various electrical and fibre interfaces, to be extended to 622Mbps and WDM.



Fibre Division



Metrodata Overview – a technically excellent British communications company

You think you have an issue connecting communications equipment and network services together ? – not any more - Metrodata will have developed the solution to your current need, and we are already developing the solutions for your future needs!

The communications world is full of techno-terminology and mystique. Convergence, fibre, SDH, STM1, ATM, integration, copper, interface conversion, interface extension, coaxial, DSU, satellite, broadband, connectivity, access, standards and so on.

Carriers and Service Providers are coming under increasing pressure from the market to provide more than just leased lines. End to end management of their services, fast service provision, flexible bandwidth and tariffing, remote management and diagnostic tools are some examples.

Be assured, the **Metrodata Fibre Division** is working closely with users and SP's to create innovative solutions and services.

Metrodata are the experts to guide you to your network solution.

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