

APPLICATION NOTE

Presentation of 155 Mbps STM-1 services on BNC connectors, and their connection to Routers or ATM switches with multimode fibre interfaces

- Low-cost presentation of single-mode fibre SDH services at BNC Coaxial
- Niche low-cost conversion to BNC G703 SDH delivery for Multimode-interfaced CPE
- Removes the need for an expensive G703 or single-mode router interface
- Use cheaper multimode fibre in buildings
- Ease of installation and configuration

Fibre Division



Application Opportunities

STM-1 155Mbps services are normally delivered via single-mode fibre from the core SDH network. The presentation of STM-1 to the user by the Service Provider can be BNC, to avoid the need to use an expensive single-mode interface on the router.

If the user equipment has a multimode interface, then conversion from multimode to BNC, again, is cheaper than either a G703 or single-mode interface on the user equipment.

The FC4x00 from Metrodata offers solutions to these and other application opportunities. Service provision of STM-1 on BNC connectors, from single-mode fibre delivery, is made possible by the FC4100 for shorthaul, and the FC4200 longhaul. Multimode user equipment interfaces can connect to G703 STM-1 with the FC4000.

Where presentation of SDH bandwidth needs to be, or is, BNC at 155Mbps, the Metrodata FC4x00 range of fibre converters offers low-cost easily-installable solutions.

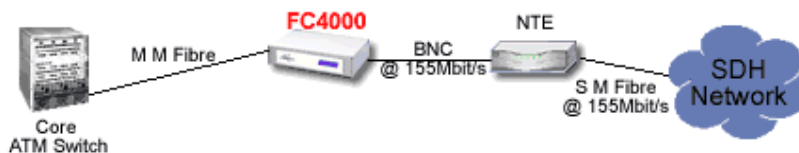
Here is a clear opportunity to support high speed services from SDH cores via fibre at the interface desired and at lower cost.

Typical Applications

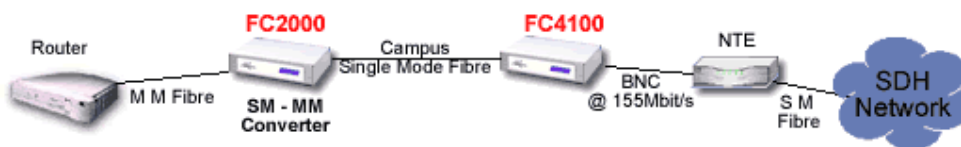
1. Connecting a Multimode-Interfaced router to BNC-presented STM-1



2. Connecting an ATM switch with Multimode interface to a BNC STM-1 service



3. Remote connection of a router via a campus network to a BNC-presented STM-1 service.



The Metrodata FC4x00 solution

The Metrodata FC4x00 fibre converters provide a challenging level of price/performance for delivering and connecting to STM-1 155Mbps services at BNC electrical interface.

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 FC4x00 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, BNC connectors and power and the FC4x00 transports data at STM-1 rate of 155Mbps.

The FC4100 and FC4200 can be used for terminating single-mode fibre service deliveries, shorthaul and longhaul respectively, presenting BNC connectors for the user equipment. The FC4000 offers a low-cost multimode conversion to BNC thus enabling customers to retain use of their legacy equipment. The fibre connectors in all cases are the SC type but FC/PC can be fitted on request.

The FC4x00 family are part of a range of fibre conversion products from Metrodata offering solutions from 2Mbps up to 155Mbps, to be extended to include 622Mbps and WDM (bi-directional down the same fibre).



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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