

APPLICATION NOTE

Interconnecting G703 2Mbps CPE devices via fibre cable in a campus or local environment

- Utilises (existing) on-site dark fibre
- Avoids using microwave aerials or infra-red for cross-campus links
- Ideal for interconnecting two PBX's or routers
- Interconnection of various faculties/buildings for voice and data
- Very low-cost and highly flexible solution



Application Opportunities

The cost of fibre is falling dramatically and the need to interconnect existing various communication infrastructure over a greater distance, even on-campus is growing. In many academic and local authority organisations, fibre cable probably already exists, but not yet used.

Interconnection of PBX's and routers, for example, at 2Mbps, can now be achieved cheaply, easily and reliably.

Any G703 devices (or non-G703 via an Interface converter) can be connected at BNC electrical (coaxial copper) connection, or RJ45 (CAT5 twisted pair copper).

Typical Applications

1. Circuit Switched PBX to distant on-site G703/RJ45 NTE



2. Two interconnected PBX's



3. X21 router to G703/RJ45 NTE



4. Local link from communications building to distant on-site wide-area microwave equipment



The Metrodata FC1000 solution

The Metrodata FC1000 provides a new level of price/performance for extending and interconnecting local communication infrastructures using fibre cable. The cost of fibre is falling and the level of voice and data communication, certainly on-campus, grows dramatically.

Most Customer Premise equipment will not have the specialised fibre cable interface connectors – which is precisely where the Metrodata FC1000 solves the problem cost-effectively, easily and reliably.

Initially for singlemode fibre cable, the FC1000 extends the operating distance to several kilometres. The electrical path through the connection is totally transparent and protocol-independent. This means the signal can be framed or unframed. [The PBX G732/G704 Timeslot structure will not be affected, nor would any IP router protocol]

The fibre interface connector is the standard SC type, whereas the G703 connection is a choice between twin BNC coaxial connectors or single RJ45. The FC1000 can be desk-top or rack-mounted. A dual-unit rack adaptor or a racknest for up to 18 units are available. The FC1000 has integral mains or 48 volt power supply.

The FC1000 is 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 622Mbit/a and WDM.



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.

Contact Details

For further information regarding this or other Fibre and conversion Applications please contact the Fiber Solution Team.

Email: sales@metrodata.co.uk

Tel: +44 (0) 1784 744 710

Fax: +44 (0) 1784 744 730

Alternatively visit our Website at: <http://www.metrodata.co.uk/>

