

Do you need to make
the connection?

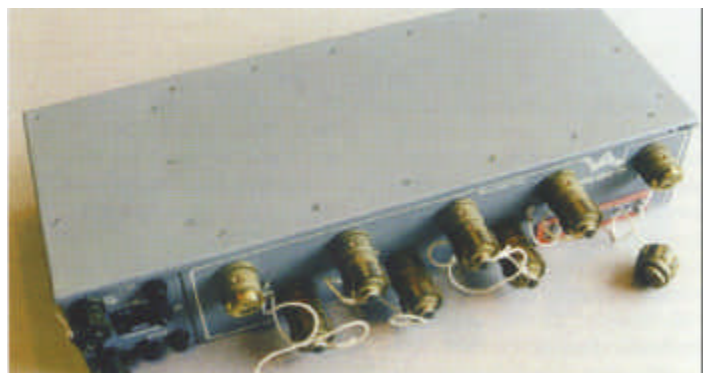
Amphenol

The Inter-Connection

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Interconnection of Tactical LANs



Ruggedised ethernet hub and fibre optic cable assembly.

Information is key to the success of any task, so it is of paramount importance that the ability to handle and process such data is available. Within industry, this task would have been undertaken by an isolated individual, but this is no longer the case and help is needed. Companies are now able to link their computer systems through an integrated LAN (Local Area Network), making information available to everyone on the network. The modern army has chosen to use a similar system.

Modern industry and the modern army both use a "Fibre Optic Backbone" to link individual computers back to Hubs, Routers and Bridges. However, the installation of the "Fibre Optic Backbone" is fixed within modern industry, but due to being constantly on the move, the installation within the modern army has to be broken down and reconfigured (sometimes as often as four times a day), and in locations such as bombed out buildings or tented accommodation.

EIARRCIS is one such system currently operating with the UK NATO forces in the field, Amphenol was responsible for both the design and development of the "Fibre Optic Backbone" on the EIARRCIS system, in conjunction with EDS, the main contractor.

In designing the system, Amphenol had to take into account several key issues.

Reliability - There was a need for the connectors to survive in the battlefield environment and be durable enough to withstand the constant breakdown and reconfiguration of the system, as the task force relocates while maintaining theoretical performance of the system.

Configurability - With the constantly changing system setup, it is necessary to have a flexible system. The design comprises of 20m and 200m cable assemblies, using hermaphroditic butt joint connectors, enabling the system to be "daisy chained" together, in order to fit the required cable lengths and with out the need to orientate the assemblies.

Cost - With cost as a major driver, it was clear that the use of a lensed fibre optic connector was too expensive and too large for the side of a PC so a new connector was designed to suit the specific environmental and optical conditions.

The LAN was not specified for use in front line tactical conditions, but to be employed in locations such as bombed out buildings or tents, a few miles back from the action. With this in mind, the cost could be considerably reduced by using a butt joint fibre optic connector, the HMF. This provided the user with a connector capable of meeting the environmental conditions, without the added expense of using a lensed version.

Size - Due to the use of butt joint hermaphroditic technology the connector could be designed to suit the Ruggedised PC and Hub. The design is half the size of the standard lens connector, with the receptacle incorporating the active components, thus reducing the overall size even further.)

Amphenol - Total Quality

Amphenol Limited has gained an enviable reputation as a supplier of high quality interconnection systems. In addition to ISO 9001 status across all its manufacturing sites, Amphenol has a vast range of specific product and customer approvals coupled with awards at both regional and national level for achievements in environmental conservation and for business processes.

These all add to Amphenol's ability to 'service the customer'.

However, not content with the above approvals, Amphenol Limited is now employing the EFQM Business Excellence Model to further enhance its business operating systems and to give 'total customer focus' to all its areas of operations.

Amphenol's president, Martin Loeffler has stated that 'In a major survey carried

out in the U.S.A, customers placed Amphenol first among all major connector manufacturers for the highest value received'. It recognises Amphenol's success in developing new products in partnership with its customers to satisfy their specific needs for innovative interconnect solutions and it confirms Amphenol's global strength in providing customers with the same quality service and complete product offering wherever

they are in the world'.

New technology, designs, product introductions, launches, management information systems and manufacturing methods, reinforced by assured quality systems are all ensuring that Amphenol are a major force in the 'interconnection industry'

Amphenol's goal is :-

Total Customer Satisfaction