
Optical-Fiber Links for 100VG-AnyLAN

As data rates increase, low-cost optical-fiber links play an increasingly significant role in LANs for extending the length of links beyond what can be achieved with copper media, while meeting the full range of electromagnetic emission and susceptibility requirements for networks.

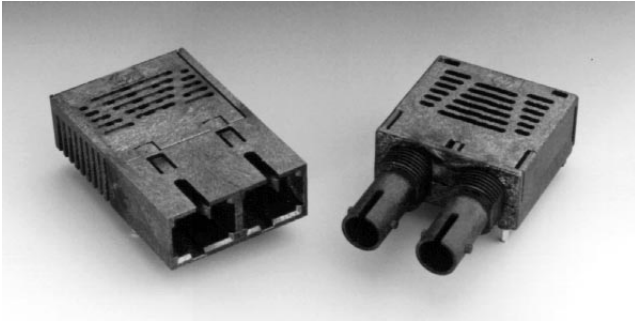


Fig. 1. HP optical transceiver.

The 100VG-AnyLAN standard defines a serialized interface with a 120-megabaud signaling rate for STP and multimode optical-fiber links. The standard defines two optical-fiber link length specifications, which allow the use of low-cost 850-nm technology for 500-m building backbones (this is the same technology used in the existing IEEE 802 standard CSMA/CD 10Base-F and 802.5J token-ring links) and 1300-nm technology for 2-km campus backbone links.

Fig. 1 shows the new Hewlett-Packard low-cost industry-standard optical transceiver package. This small package is 1 inch wide and 1.5 inches long and has a duplex SC optical connector on the front and a 1-by-9 row of electrical pins at the rear. HP transceivers HFBR 5106/5107 meet the two 100VG-AnyLAN link length standards and allow interchanging link technology in the same printed circuit board footprint. The transceivers are also available with AT&T ST optical connectors to address the large installed base having ST connectors for building and campus backbones.

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