

Ethernet Private Line



- **Carrier Class Ethernet**
- **Protocol-transparent Ethernet technology**
- **Highest traffic quality on the market**
- **Service Level Agreement (SLA) with 99.7 % or 99.99 % availability**
- **Delivered on fibre, copper, or wireless media**

Ethernet Private Line is a professional network connection delivered on fibre with active Gbit-capable equipment. Non-overbooking and Carrier Class Ethernet technology provide the highest available traffic quality on the market.

Simplify your network with LAN technology

Ethernet Private Line (EPL) integrates seamlessly as an extension to your existing LAN. The network may be managed as if remote offices were located on the main premises.

Speeds

Speeds from 2 Mbit/s to 10 Gbit/s over electrical or optical interfaces are available. When your network has been set up it is quick and easy to upgrade your connections when more bandwidth is required.

Typical uses

- Interconnection of enterprise networks, e.g. when the headquarters needs to be connected to remote offices
- Server park consolidation & centralization – place servers at locations with optimal conditions for O&M
- Simplification of enterprise data networks - see fig. 2

100 % transparency

The link is transparent for all types of Ethernet frames and it is possible to use multilevel VLAN stacking as well as supplier specific protocols over an Ethernet Private Line.

Quality of Service

Ethernet Private Line provides a traffic quality close to the theoretical limit as given by the speed of light in fibre, and is suitable for any traffic type, including the most demanding types, such as IP telephony and video streaming.

No need for external IP co-ordination

As Ethernet Private Line is fully transparent for IP, there is no need to coordinate IP addresses or other IP-related parameters with GlobalConnect. This simplifies procedures, saves time, and provides for a simpler overall IP-configuration of the network.

Redundancy and Service Level Agreement

If you want to be protected against cable cuts or breakdowns of equipment, Ethernet Private Line is available with redundancy. We provide two separate routes to each address, where we terminate the connections in one or two switches as required. If one route becomes unavailable, you have access to the full capacity on the other route. When ordered with redundancy, GlobalConnect offers an availability of 99,99%, which is the highest on the market.

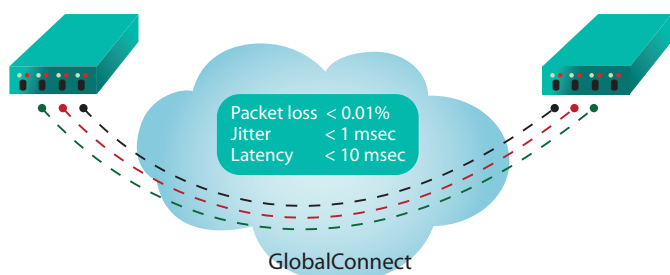


Figure 1: The standard QoS level for Ethernet Private Line (EPL) outperforms most premium services in the market

Technical Data

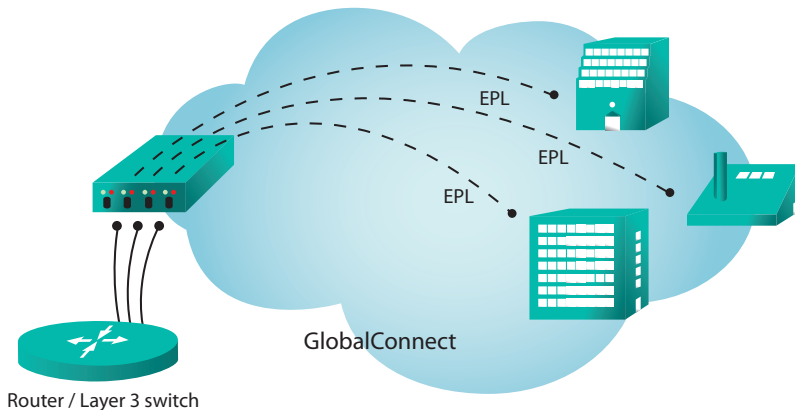


Figure 2: When connecting remote addresses, it is free of choice whether to place a router at each site, only at the central site, or even none at all

	EPL fibre end-to-end	EPL with G.SHDSL access	EPL with eBSA access	EPL with Wireless access
Interface	10/100/1000BaseT 1000BaseLX	10/100BaseT	10/100BaseT	10/100/1000Base-T 1000base-X (SFP)
Connector	RJ 45 or LC/PC	RJ45	RJ45	RJ 45 or LC/PC
Speeds	1 Mbit/s - 10 Gbit/s	2.3 , 4.6, 6.9 or 9.2 Mbit/s	2, 5 or 10 Mbit/s	25 Mbit/s – 1 Gbit/s
Latency*	< 10 ms, typical 5 ms	< 10 ms, typical 5 ms	<15 ms	< 10 ms, typical 5 ms
Jitter	< 1 ms	< 1 ms	< 1 ms	< 1 ms
Packet loss	< 0.01 %	< 0.01 %	< 0.01 %	< 0.01 %
Maximum number of MAC-addresses	2,000	2,000	Default 8. Opt. up to 64	2,000
Redundancy available**	Yes	No	No	Yes
Fail-over switching time	30 s (auto-failover) 50 ms (High speed) auto-failover	N/A	N/A	30 s (auto-failover) 50 ms (High speed) auto-failover
Availability guarantee, standard	99.7%	99.7%	99.7%	99.7%
Availability guarantee with redundancy	99.99%	N/A	N/A	99.99%
Maximum packet size (MTU)	2000 Bytes 9.200 Bytes (optional)	1526 Bytes	1500 Bytes	2000 Bytes 9.200 Bytes (optional)
802.1Q VLAN transparency	Yes	Yes	No	Yes
Stacked VLAN transparency	Yes	No	No	Yes
BPDU transparency	Yes	Yes	No	Yes
802.1p transparency	Yes	Yes	No	Yes
Multicast	Use "EPL Multicast"	No	No	Use "EPL Multicast"

* 5 ms standard route, 10 ms diverse route, both within GlobalConnect coverage nationally

** See separate product sheet for redundancy types