

# Technical specifications

## Ethernet VPN

### Ethernet

Service type	E-Line (Ethernet Virtual Private Line), E-LAN (Ethernet Virtual Private LAN)	
EVC quality	Basic	Premium
Available bandwidths	(5, 10, 20) <sup>1</sup> , 50, 100, 200, 500, 900, 1000, 2000, 5000, 10000	
Throughput guarantee <sup>2</sup>	20%	99,9%
Demarcation at customer location	CPE or ODF	
VLAN transparent	Yes	
Frame Delay	Best effort	< 10 ms
Frame Delay Variation (Jitter)		< 5 ms
Frame Delay Frame Loss Ratio		< 0.1%
Supported protocols	All OSI layer 3 protocols	
Tunneled traffic	Tunneled OSI layer 2 control frames will not be accepted on the UNI	
Max. # MAC addresses	E-Line: unrestricted; E-LAN: 5000 per UNI	
MTU size (standard)	1596 bytes	
MTU size (jumbo frames, optional)	9000 bytes	
Priority (IEEE802.1p)	Customer P-bits will not be changed and will be transmitted without the value affecting the prioritization of the traffic in the Eurofiber Network.	
Ethertype	0x8100	
Maximum Broadcast / Multicast traffic	1% of the interface bandwidth	

<sup>1</sup> Bandwidths less than 50 Mb/s only as additional EVC at the same location

<sup>2</sup> Throughput guarantee includes frame header

<sup>3</sup> CDP, STP, VTP and LACP are the protocols currently supported. The 802.1ea (mac-sec) protocol is not supported. An up-to-date list of tested OSI layer 2 protocols is available on request. An untested protocol can be tested for transparency on request.

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### Physical interfaces

Demarcation	Interface   connector   cable type	Reach	1 Gb/s	10 Gb/s	100 Gb/s	Customer location	Customer	NNI location
CPE 1G	1000BASE-SX   LC   Multi Mode	550 meters	Optional	n/a		✓		
CPE 1G	1000BASE-LX   LC   Single Mode	10 km	Optional	n/a		✓		
CPE 10G	110/100/1000BASE-T   RJ-45   UTP	90 meters	Standard	n/a		✓		
CPE 10G	1000BASE-SX   LC   Multi Mode	550 meters	Optional	n/a		✓		
CPE 10G	1000BASE-LX   LC   Single Mode	10 km	Optional	n/a		✓		
CPE 10G	10GBASE-SR   LC   Multi Mode	400 meters	n/a	✓		✓		
CPE 10G	10GBASE-LR   LC   Single Mode	10 km	n/a	✓		✓		
E-POP 1G	1000BASE-SX   LC   Multi Mode	550 meters	Optional	n/a			✓	✓
E-POP 1G	1000BASE-LX   LC   Single Mode	10 km	Standard	n/a			✓	✓
E-POP 10G	10GBASE-LR   LC   Single Mode	10 km	n/a	✓			✓	✓
E-POP 100G	100GBASE-LR4   LC   Single Mode	10 km	n/a	n/a	✓			✓
ODF 1G	1000BASE-LX/LH   SC/APC   Single Mode	10 km	✓	n/a		✓		
ODF 1G	1000BASE-EX   SC/APC   Single Mode	40 km	✓	n/a		✓		
ODF 1G	1000BASE-ZX   SC/APC   Single Mode	80 km	✓	n/a		✓		
ODF 10G	10GBASE-LR   SC/APC   Single Mode	10 km	n/a	✓				
ODF 10G	10GBASE-ER   SC/APC   Single Mode	40 km	n/a	✓				
ODF 10G	10GBASE-ZR   SC/APC   Single Mode	80 km	n/a	✓		✓		