

## GigaClass Services

# Data services from 1 Gbit/s

GigaClass services cover the following connection types: SDH/SONET, Gigabit Ethernet, fiber channel as well as transparent-bit connections. The GigaClass Services from UPC Business are characterised by the highest levels of service quality and availability.

All GigaClass Services are imaged on the UPC Business optical platform, and are thus subject to only minimal maintenance work in the UPC Business network. The service quality is determined solely by the optical latency period and possible bit error rates. The average latency period is 1 ms per 200 km distance covered. The effective distances covered depend on the optical fiber path and the required compensation fiber lengths for a bandwidth of 10 Gbit/s. Transparent-bit connections are available only up to 2.5 Gbit/s, as no bit error detection – and thus no automatic error correction – is possible for these connections. Link status signals are transferred transparently via the optical network; for example, an «Ethernet far end link down» is signalled at the local service port.

The «Equipment and Path Protection» option meets the highest demands in terms of availability. The connection options are not limited to point-to-point connections. GigaClass Services can also cover network structures with several locations.

It is possible to use several GigaClass Services with the same optical fiber connection. Different connection types, such as fiber channel and gigabit Ethernet, can be combined. The use of several GigaClass Services offers even better value for money.

## Standard features

Network access	Optical fiber
Synchronous connections	STM-4 / OC-12 STM-16 / OC-48 STM-64 / OC-192
Ethernet and Gigabit Ethernet Fiber Channel connections	Gigabit Ethernet 10GE LAN / 100GE LAN 1G FICON / 2G FICON 1G-/2G-/4G-/8G-/10G-/16G-FC
Video and transparent-bit connections	SMPTE 292M Lambda (transparent-bit optical channel up to 2.5 Gbit/s)
Optical interfaces	850 nm MMF 1,310 nm SMF 1,470–1,610 nm SMF (CWDM)
Latency	~ 1 ms per 200 km
Error rates	$10^{-12}$ to $10^{-15}$
Fault line	7 × 24: 24 hours / 365 days
Support time	5 × 11: Monday to Friday, from 7:00 am to 6:00 pm
Service Level "Basic"	Fault elimination within 24 hours during the support time

## Options

Redundancy	Equipment Protection Path Protection Equipment and Path Protection
Extended support times	6 × 16: Monday to Saturday, from 7:00 am to 10:00 pm 7 × 24: 24 hours / 365 days
Extended service levels	Bronze: 99.8% availability per year, max. 8 hrs downtime during the support time Silver: 99.9% availability per year, max. 6 hrs downtime during the support time Gold: 99.9% availability per year, max. 2 hrs downtime during the support time* Platinum: 99.95% availability per year, max. 1 hr downtime during the support time*

\* Prerequisites: Service must be connected using path redundancy

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