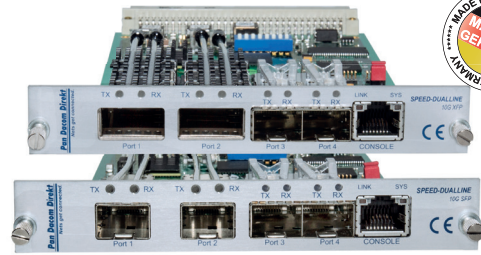


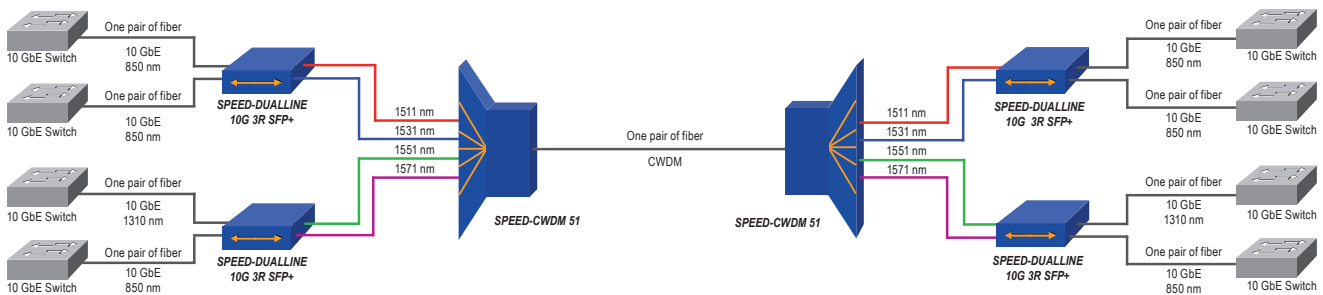
Compact 10.3 Gbps Ethernet 2 channel transponder with 3R functionality

- » 2 channel XFP/SFP+ transponder for 10,3 Gbps Ethernet
- » CWDM and DWDM support
- » 1+1 protection with switching time < 50 ms
- » 3R Signal regeneration for the realization of repeater sites
- » 4 x SFP+ or 2 x SFP+ to 2 x XFP version



tunable DWDM 40G ready 100G ready

Connection of 10.3 Gbps Ethernet networks over CWDM and DWDM

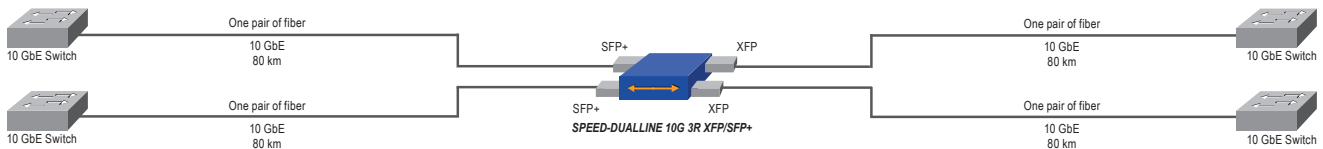


The SPEED-DUALLINE 10G 3R module is designed as an flexible and high data rate transponder. Depending on customers requirements this module offers both, four

SFP+ ports or alternatively two SFP+ to two XFP ports. The SPEED-DUALLINE 10G converts two independent 10.3 Gbps Ethernet signals into a corresponding

wavelength in CWDM and DWDM network infrastructures.

SFP+ to XFP conversion with 10.3 Gbps Ethernet for long distances with 3R

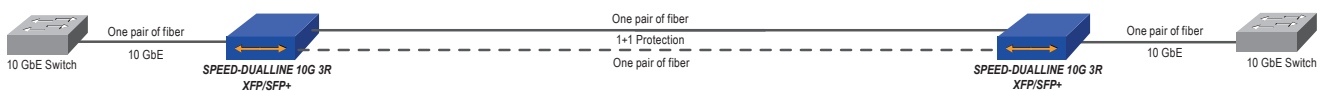


Another field of application for the SPEED-DUALLINE 10G 3R is the interface conversion

of SFP+ or SFP to XFP. Combined with the 3R functionality (Re-amplification, Re-shaping and Re-timing) a transmission of 10G

Ethernet over long distances can be implemented.

1 + 1 protection for a reliable connection of Ethernet systems



Moreover the SPEED-DUALLINE 10G 3R XFP/SFP+ is suitable to establish a 1+1 protection of transmission links. For this feature the transponder transmits one

single 10.3 Gbps Ethernet channel via two redundant transmission links. In the event of link loss, e.g. caused by a cable break, the module switches automatically to the

backup link with a switching time below 50 ms.

Technical Specifications

General

- Design: 1-slot module card
- Dimensions (H x W x D): 21 x 128 x 185 mm
- Power supply via backplane:
 - AC: Redundant 230V
 - DC: Redundant 24/48V power supplies in 19"-chassis
- Ambient temperature:
 - Storage: 0°C to +40°C
- Humidity: 90% (not condensing)
- LED indication: Device status, optical link, local loops

Specification of the interfaces

- Number of interfaces: 4xSFP+ / 2xSFP+ and 2xXFP ports
- Transceiver types: Use of SFP, SFP+ and XFP-modules according to MSA standard
- Data rate: 10.3 Gbps
- Protocol: 10.3 Gigabit Ethernet

- Wavelengths and distances (depending on used transceivers)
 - 850nm (500m)
 - 1310nm (10-20km)
 - 1550nm (40-80km)
 - CWDM (20-120km)
 - DWDM (40-80km)
 - DWDM tunable (40-80km)
 - Higher distances on request

Test and security features

- Bit-Error-Rate-Test (BERT)
- Loop switching regarding the ports (LOOP)
- Shutting down of client ports at signal loss on line port (LLCF)
- 1 + 1 protection (optional)

Management

- Integrated SNMP agent and alarm notification via SNMP trap

- Transceiver management information provided by integrated DMI functions: input/output power, wavelength, data rate, status, supported protocol, operating temperature

Chassis types

- SPEED-CARRIER 1U
- SPEED-CARRIER 5U

Standards

- RoHS- und WEEE-conformity
- EN 60950, 55022 (Class B), 55024
- VDE 0804, ETS 300 019
- "Made in Germany" (design and production)

Ordering options

- SDL10G-2XFP-2SFP-A: SPEED-DUALLINE 10G 2R XFP
- SDL10G-2SFP-2SFP-A: SPEED-DUALLINE 10G 3R SFP+
- SDL10G-2XPR-2SFP-A: SPEED-DUALLINE 10G 3R XFP