Compact optical 10 Gbps Module with 3R Functionality



- » Protocol transparent (9.95 to 11.32 Gbps)
- » 10 Gbps signal repetition for 10 GbE, 10 Gigabit FC and STM-64
- » 10 Gbps conversion: Multi-mode, single-mode, CWDM, DWDM
- » Future-proof and flexible XFP technology
- » 3R functionality
- » Tunable lasers for DWDM wavelengths available



Increasing Range by Conversion from MM to SM and Regeneration

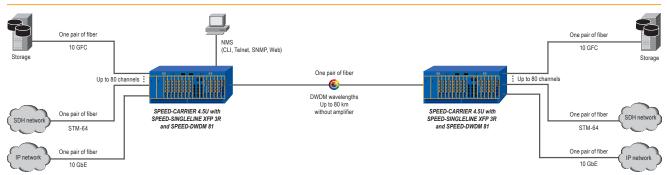


The SPEED-SINGLELINE XFP is a cost-saving conversion module for high-speed 10G signals. The module supports two flexible XFP ports suitable for wavelength conversion (850 nm, 1310 nm, 1550 nm, CWDM/DWDM or tunable optics) while the

optical power budget (up to 24 dB/approx. 80 km distance) and the transferring application (10 GbE, 10 GFC, STM-64) are individually defined. The SPEED-SINGLELINE XFP can be used for existing 10 Gigabit systems like 10 Gigabit Ethernet switches to

achieve long distances (up to 80 km). Thus existing 10 Gigabit systems are not restricted to installed 10 Gigabit optics which are limited to a few kilometers.

10 Gbps Wavelength Conversion for DWDM Networks



The main field of application are cost-efficient CWDM and DWDM networks. As an intelligent transponder module, the SPEED-SINGLELINE XFP converts a transparent data channel to a corresponding CWDM/DWDM-wavelength. The module

can also be used as a repeater by utilizing the implement 3R functionality (reamplification, re-shaping, re-timing) for signal processing. Data rates between 9.95 Gbps and 11.32 Gbps are supported. Two types of housings are available for an installation in a 19" shelf. 16 slots are provided by using the SPEED-CARRIER 5U while a SPEED-CARRIER 1U supports up to four modules. Both housingtypes can be monitored and configured via the optional management module SPEED-NMS OE.

Specifications

General

- 1-slot module for insertion into a SPEED-CARRIER Operating temperature: 0 $^\circ$ C 40 $^\circ$ C
- Dimensions (H x W x D): 28 x 131 x 170 mm

Interfaces

- Two XFP ports (1 x line, 1 x client)
 Protocol: Transparent or XFP specific
- Data rate: 9.92 Gbps to 11.32 Gbps depending on XFP type and application used

Test features

- BERT functionality
- Loop functionality

XFP types

- SOptical (LC) with and without FEC:
- 10 GbE
- 10 GFC
- STM-64
- Multi protocol for 10 GbE, 10 GFC, STM-64
 Wavelengths: 850 nm, 1310 nm, 1550 nm, CWDM, DWDM or tunable optics

- Management
 SNMP, Telnet and HTTP management via management module (SPEED-NMS OE)
- XFP management information provided by integrated DMI functions: input/output power, wavelength, bit rate, status, supported protocols, temperature

Optional

• Without 3R for distances up to 40 km

Housing types • 1-slot standalone housing

- 4-slot SPEED-CARRIER 1Ŭ
 16-slot SPEED-CARRIER 5U

Ordering options • SSL-XFPR-XFPR-A:

SSI -XEP-XEP-A:

SPEED-SINGLELINE XFP with 3R SPEED-SINGLELINE XFP with 2R

Pan Dacom Direkt Nets get connected.