

RAMAN amplifier for DWDM transmission with optimized OSNR

- Distances: additionally up to +30 dB optical budget
- Optimized signal-to-noise ratio (OSNR)
- Reduction of nonlinear distortion
- Reduction of high-power Transceiver
- Remote management over OSC channel
- Supports DWDM wavelengths

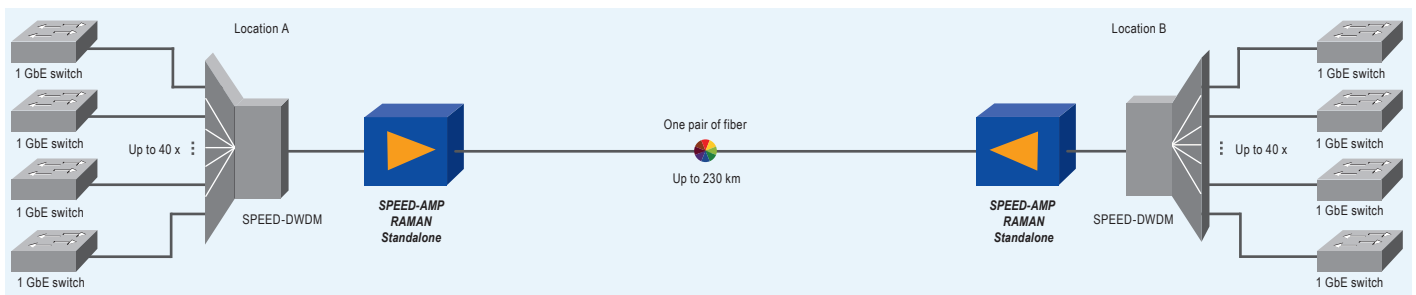


RAMAN amplifier for point-to-point transmission with an optimized OSNR

The use of a Raman amplifier (standalone) on the receiving side, in addition to an existing EDFA amplifier, increases transmission distances in optical networks significantly. Therefore SPEED-AMP RAMAN reduces non-linear distortion and provides an optimized signal-to-noise ratio Wor-

king condition for a fully capability is a minimum fiber length of 50 km. The SPEED-RAMAN series provides two different type of amplifier (Standalone and master-slave) to fulfill different demands of distances, and yet compliant to laser safety class 1M. These modules are installed in

space-saving housing types (SPEED-CARRIER 5U and SPEED-CARRIER 1U/B). When using multiple cards in the same segment, the acquisition of management functionality can be enabled by using an in-band OSC channel.

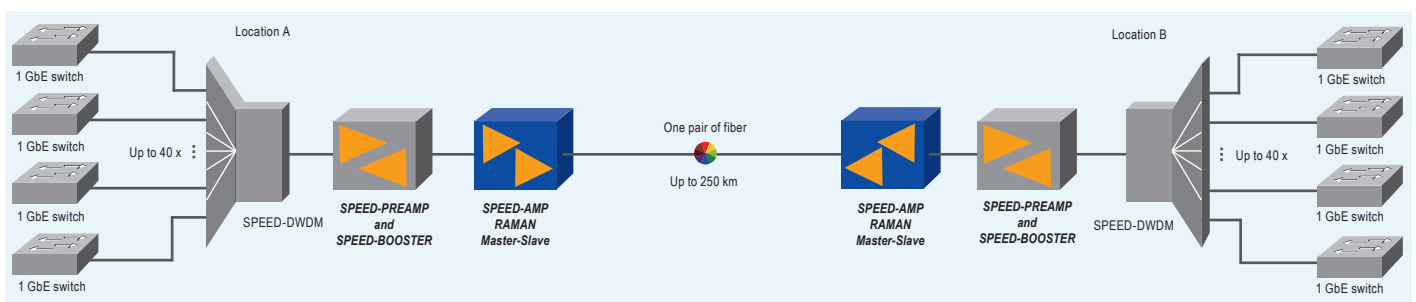


Using Master-Slave RAMAN amplifier to accomplish additionally 30 dB optical budget

The deployment of two Raman amplifier (master-slave) increases the transmission range of the overall system with up to +30 dB (equivalent to approximately 120 km of fiber attenua-

tion). The RAMAN amplifier at receiving side is called „Master“ and at transmitter side is called „Slave“. An innovative safety concept has been enabled, where the master module contains the

safety circuit and controls the slave module. Thus compliance to Laser Class 1M is guaranteed.



Specifications

- General**
- LED indicators: Unit status, optical link, OSC status, Ethernet link
 - Dimensions (H x B x T): 56 x 131 x 170 mm
 - Power supply provided via backplane
 - Laser safety class 1M
- Management**
- Telnet, CLI
 - SNMP and Web GUI by using a management module (SPEED-NMS OE)
 - Remote management provided by OSC channel (1510 nm)
- Optical interfaces**
- Counter Pump: E2000-PS
 - Co Pump: E2000-PS

Ordering option

- S-ORA-10-A
- S-ORA-15-A
- S-ORA-10M-A
- S-ORA-15M-A
- S-ORA-10S-A
- S-ORA-15S-A

SPEED-AMP RAMAN - 10 dB
 SPEED-AMP RAMAN - 15 dB
 SPEED-AMP RAMAN - 10 dB, master module
 SPEED-AMP RAMAN - 15 dB, master module
 SPEED-AMP RAMAN - 10 dB, slave module
 SPEED-AMP RAMAN - 15 dB, slave module

Ethernet interfaces

- 2 x 10/100BaseT (RJ-45)
- 1 x 100BaseFX (SFP)
- Auto-MDI/MDI-x

Housing types

- 4 slots SPEED-CARRIER 1U
- 16 slots SPEED-CARRIER 5U

+49 (0) 6103 / 83 4 83 - 333
 info@pandacomdirekt.de
 www.pandacomdirekt.de