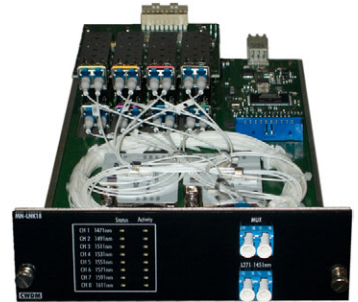


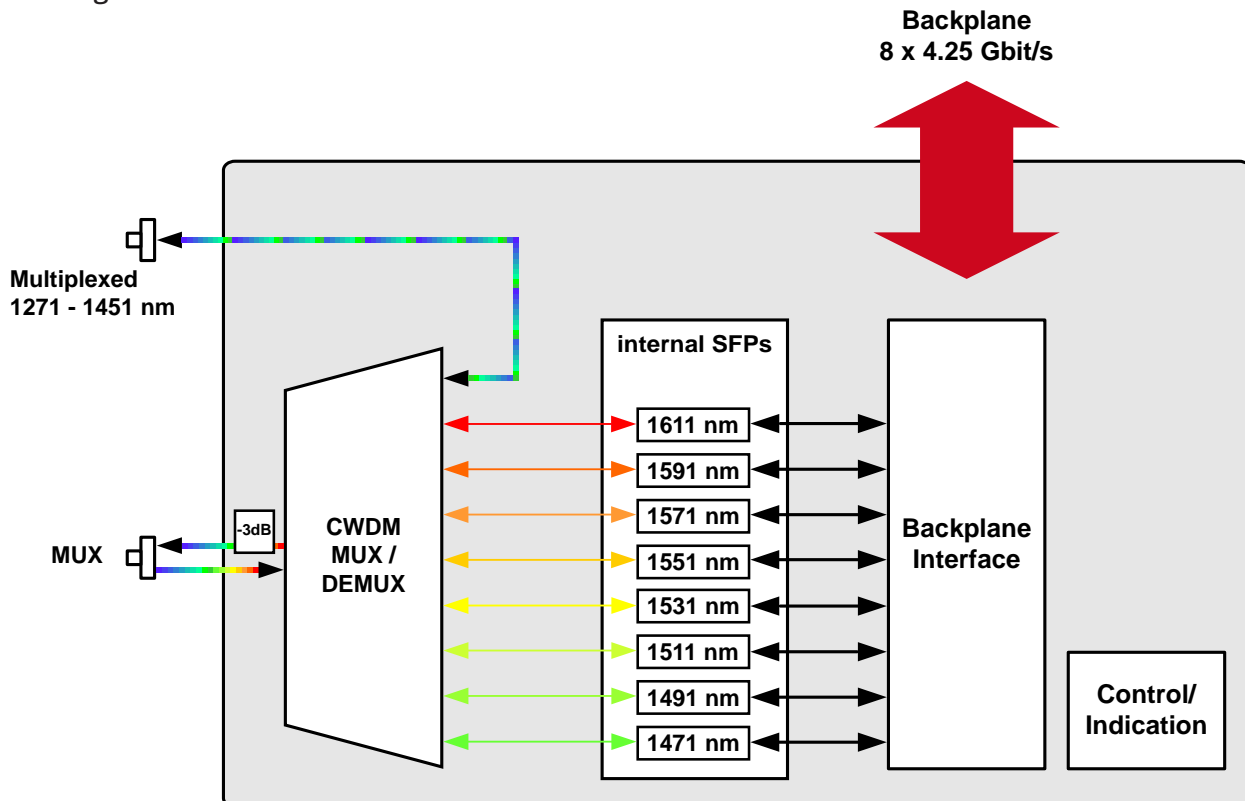
MediorNet MN-LNK18-CWDM

The MN-LNK18-CWDM Link Card allows the interconnection to another MediorNet frame via one bi-directional duplex fiber connection with 18 different CWDM wavelengths.

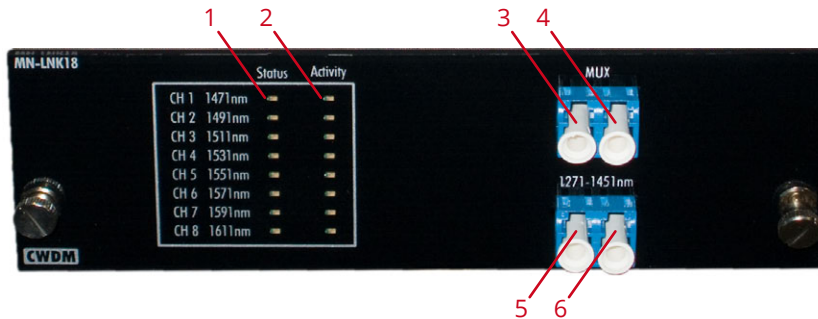


- 8 internal SFP ports that support 4.25 Gigabit/s SFP modules
- 10 external fiber Ports via LC connectors (already multiplexed)
- Integrated CWDM multiplexing / de-multiplexing
- Multiplexing on one single-mode duplex fiber, accessible via LC connector
- Support of single-mode SFP transceivers only
- Different wavelengths are used in the various MediorNet cards.
The 'MN-LNK18-CWDM MUX' port must only be connected to a 'MN-LNK18-CWDM MUX' port!
The 'MN-LNK18-CWDM ADD' port must be connected either to a 'MN-LNK10-CWDM MUX' or to a 'MN-LNK8-CWDM MUX' port!
- The external channels are multiplexed passively to the MUX output of the card.
The frame with the MN-LNK18-CWDM Card is not able to access the external signals.
- A removable 3dB attenuation is placed by default at the MUX output port.
- The MN-LNK18-CWDM Link Card must be fitted into two 4x High-Speed slots and it occupies two slots, so it must be placed in the slot 7/10 of the Modular mainframe.

Block Diagram



MediorNet MN-LNK18-CWDM



Legend

- 1) Status LEDs internal channels 1 - 8
- 2) Activity LEDs internal channels 1 - 8
- 3) MUX Port 1271 - 1611 nm TX
- 4) MUX Port 1271 - 1611 nm RX
- 5) ADD Port 1271 - 1451 nm TX
- 6) ADD Port 1271 - 1451 nm RX

Status LEDs

	off	green	orange	red
Link Status	No SFP present	SFP present, link up	SFP present, link down	Link active, SFP RX power error
Link Activity	No connection	Connections present and OK	--	Connections present and damaged

Bi-Directional Ports

Mux/Demux Specifications	
Channel Number	10
Central Wavelength	1271, 1291, 1311, 1331, 1351, 1371, 1391, 1411, 1431, 1451 nm
Passband	min. $\lambda_c \pm 6.5$ nm
Mux Isolation	min. 15 dB Adjacent Ch. min. 15 dB Non-adjacent Ch.
Demux Isolation	min. 30 dB Adjacent Ch. min. 40 dB Non-adjacent Ch.
Ripple in Passband	max. 0.3 dB
Directivity	min. 50 dB
Polarization Dependent Loss	max. 0.15 dB
Polarization Mode Dispersion	max. 0.10 ps
Return Loss	min. 45 dB
Insertion Loss	max. 1.8 dB (1.2 dB @ ADD Port)
MUX Port total Input Power*	min/max: -3.1 / +11.9 dBm (with <i>LNK10</i> on ADD Port) / -3.7 / +11.3 dBm (with <i>LNK8</i> on ADD Port)
MUX Port total Output Power*	min/typ/max: +7.3 / +9.8 / +12.3 dBm (with <i>LNK10</i> on ADD Port) / +6.8 / +9.3 / +11.8 dBm (with <i>LNK8</i> on ADD Port) (including the 3dB opt. attenuation at the MUX output connector)
ADD Port total Input Power	min/max: +5.5 / +10.5 dBm
ADD Port total Output Power	min/max: -6.5 / +8.5 dBm

SFP Specifications	
The specifications of all Riedel recommended SFP modules are listed in the MN-SFP Datasheet	
Single SFP Input Power	min/max: -18 / -3 dBm
Single SFP Output Power	min/typ/max: 0 / +2.5 / +5 dBm

Possible Link Combination	min. opt. Budget with/without opt. attenuation at the LNK18 MUX output connector	min. - max. Fiber length with/without opt. attenuation at the LNK18 MUX output connector	
LNK18 with LNK10 on ADD Port to LNK18 with LNK10 on ADD Port	10.4 / 13.4 dB (only without opt. attenuation at the <i>LNK10</i> MUX output connector)	0 - 42 / 12 - 54 km (with opt. attenuation of 0.25 dB/km)	0 - 30 / 9 - 38 km (with opt. attenuation of 0.35 dB/km)
LNK18 with LNK8 on ADD Port to LNK18 with LNK8 on ADD Port	10.5 / 13.5 dB (only without opt. attenuation at the <i>LNK8</i> MUX output connector)	0 - 42 / 12 - 54 km (with opt. attenuation of 0.25 dB/km)	0 - 30 / 9 - 39 km (with opt. attenuation of 0.35 dB/km)

* all channels in use

Overall

Environmental Temperature	-5 °C to +40 °C (Non-condensing)
Supply Voltage	12 VDC
Power Consumption	8 W
Dimensions (w×h×d)	132 mm × 40 mm × 307 mm
Weight	600 g