PROSPERO
CWDM Multiplexer/Demultiplexer

PROSPERO

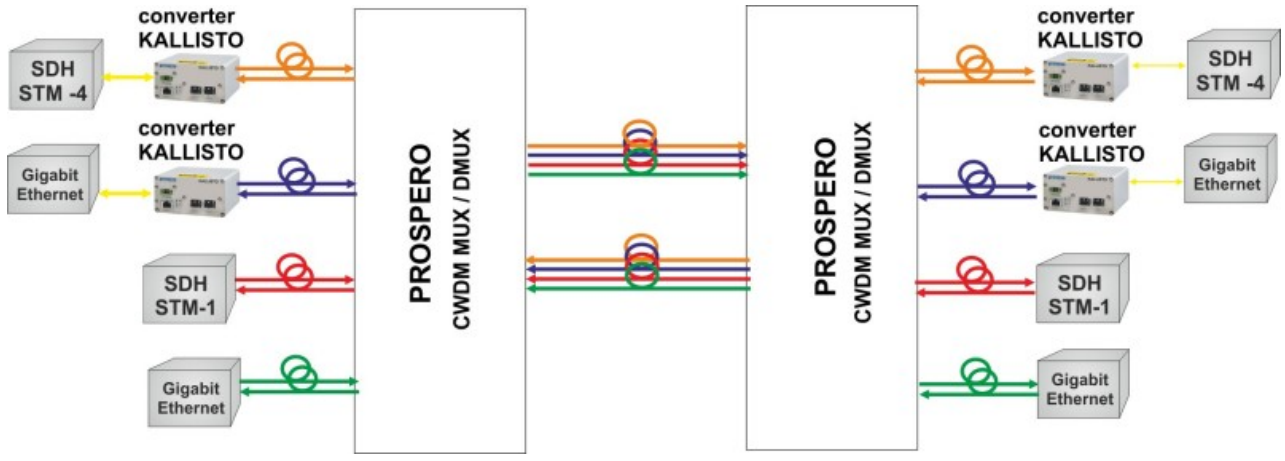
- CWDM MUX/DEMUX
- Multiplexes/demultiplexes up to 18 channels
- ITU G.694.2 standard compliant
- Operating Wavelength: From 1270nm to 1610nm
- Duplex and simplex versions (to provide bidirectional communication over single fiber)
- LC/SC connectors
- Optional Upgrade/Monitor/1310nm port
- Can work with **Kallisto** converter to connect devices with non-cwdm interfaces
- 19' 1U chassis
- High channel isolation
- Low insertion/return loss

PROSPERO device is passive CWDM multiplexer/demultiplexer built in one 19' 1U chasis, operating wavelengths from 1270nm to 1610nm (20nm spaced). Prospero multiply the capacity of existing fiber. Depending on the version of the device, PROSPERO provides bidirectional transmission of up to eighteen CWDM channels over two fibers or up to eight CWDM channels over single fiber..

Prospero device can be ordered in various configurations. Optional monitoring port can be used for measurement or monitoring purposes by coupling out 1 % of the total optical power (across all wavelengths).1310nm port on mux/demux modules can serve as cascade port for very low channels. Upgrade port can be used for a later upgrade to connect a further CWDM modules. The common configuration is 1x2, 1x4, 1x8, 1x16 channels, but device can be also orderer with other numbers of channels.

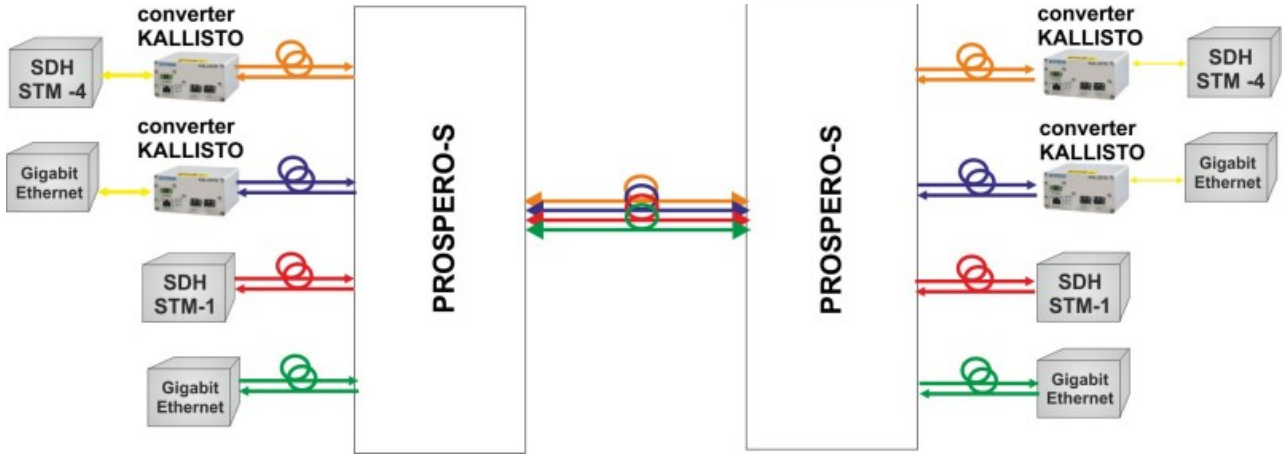
Prospero can be directly connected to all Fast/Gigabit Ethernet, SDH/Sonet, PDH devices equipped with CWDM interfaces, and indirectly (using KALLISTO converter) to devices equipped with standard optical interfaces (850nm, 1310nm, 1550nm).

A standard application is presented in the drawing below.

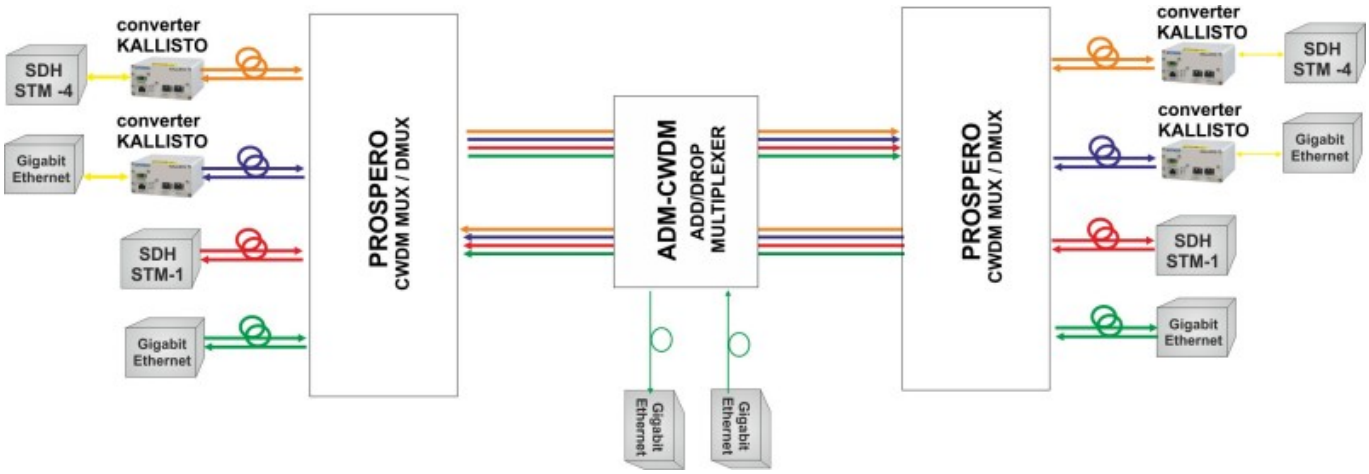


 Specification can be changed due to device development

PROSPERO multiplexer in PROSPERO-S version can provide bidirectional transmission over single fiber:



PROSPERO multiplexers/demultiplexers can operate with ADM-CWDM devices to add and drop up to 8 CWDM wavelengths in both directions.



PARAMETERS					
Number of channels		1 x 2	1 x 4	1 x 8	1 x 16
Center Wavelength (nm)		ITU, ITU+1			
Channel Bandwidth (nm)		+/- 6,5			
Channel Spacing (nm)		+/- 20			
Insertion Loss (dB) (with connectors)		1,4	2,1	2,9	4,4
Polarization Dependent Loss (dB)		0,2			
Polarization mode dispersion (ps)		0,1			
Directivity (dB)		50dB			
Riple		0,3	0,4	0,5	0,5
Isolation (dB)	Adjacent channel Non adjacent channel	30 50			
Power Handling (mW)		500			
Return Loss (dB)		45			
Connectors		LC,SC – UPC, APC			
Storage/operating temperature ()℃	Standard Extended	0 to 60 -40 to 85			
Weight (kg)		< 2			

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