



NETWORK CUBE > CWDM-MUX-2FS Module

C-1962-Rev. A

Product Description

- CWDM module for integration in 1 slot of the CUBO NETWORK CUBE WDM-Modular-Shell (C-1608).
- The module contains 1 piece of 4 channel CWDM multiplexers for 2 fiber services over 1 single fiber.
- CWDM multiplexers to mux and demux 2 fiber services by using the CWDM wavelengths from 1511 to 1571nm; these correspond to the transceiver wavelengths from 1510 to 1570 nm.
- The CWDM multiplexers are compliant with the ITU G.694.2 standard and Telcordia GR1221 (former Bellcore) standard and are designed to meet NEBS level 3.
- The sub-system interoperates with any router, switch, DSLAM, SFP and GBIC, which supports the CWDM ITU G.694.2 standard.
- Front panel is equipped with adapters according to customer choice (see below).

■ Product Description: NETWORK CUBE CWDM-MUX-2FS Module

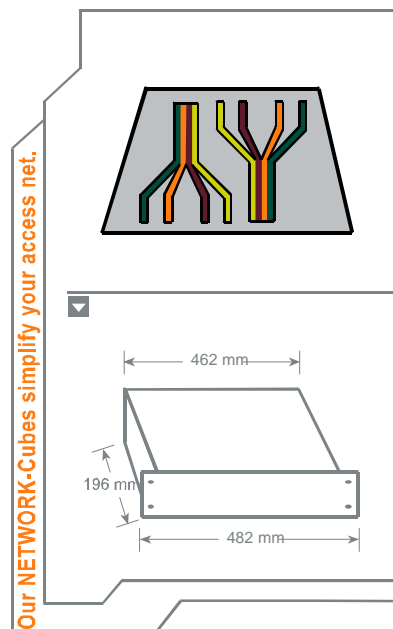
■ Product Code: C-1962

■ Connector Code: -XY (choose from table below)

■ Revision Level: -Rev.A

Example Order Code: C-1962-15-Rev.A for a module with SC/PC on all common / trunk ports and LC/PC on all CWDM channel ports

(X) Common ports	Code
(Y) CWDM channel ports	
SC/PC	1
FC/PC	2
SC/APC	3
FC/APC	4
LC/PC	5
MU/PC	6
E2000	7
E2000/HRL	8
ST/PC	9



Revision History

No.	Description	Date	Created by	Approved by
A	Initial release	17.01.08	Carsten Marheine	

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General Specifications

Operating Temperature	+0°C to +70°C
Storage Temperature	-40°C to +80°C
Max. optical Power	< 250 mW
Fiber Type	SMF-28 compatible Ø 9 / 125 / 250µm
Optical Adapters	
Common ports	to be selected by customer
CWDM channel ports	to be selected by customer

Optical Performance of the Multiplexer / Demultiplexer

Operating Channels CWDM ports [nm]	C1=1511 C2=1531 C3=1551 C4=1571
Channel Width CWDM channels	> 13 nm
Insertion Loss ¹ CWDM channels	< 2.4 dB (including connectors and adapters)
Isolation	
CWDM adjacent channel	> 30 dB
CWDM non-adjacent channel	> 40 dB
Isolation spectral range	1460 nm to 1620nm
Optical Return Loss	> 45 dB
Directivity	> 50 dB
Polarization Dependent Loss	< 0.2 dB

Notes:

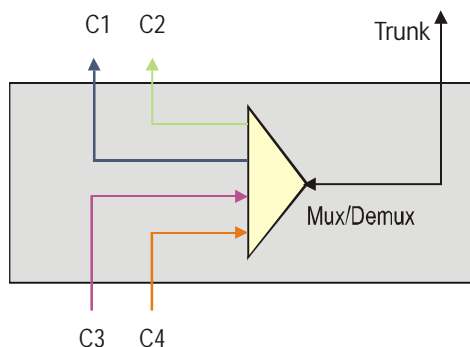
1. Max. insertion loss over channel bandwidth, valid over full operating temperature range and all states of polarization with optical connectors. The typical connector loss is 0.4 dB for a pair of connectors

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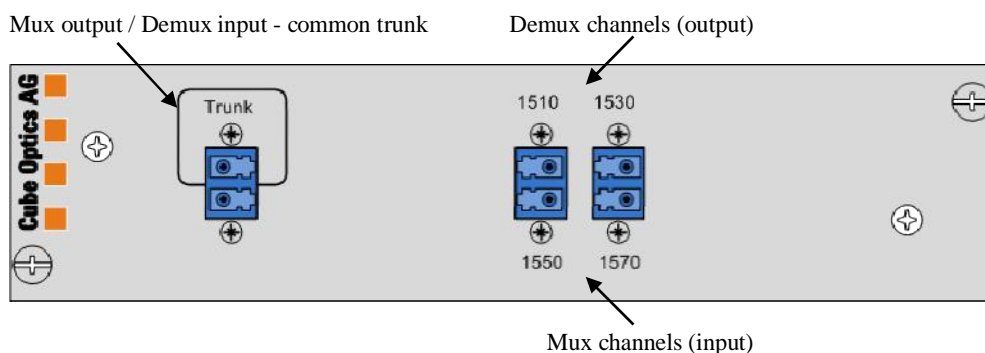
Package Dimensions and Front Plate design

Logical setup:



Connection Scheme:

- The module contains the adapters for 2 demultiplexer channels (C1-C2) on the top and 2 multiplexer channels (C3-C4) on the bottom.
- The channels are marked with “1510”, “1530”, “1550” and “1570” corresponding to the 4 transceiver wavelengths.
- The common port is marked as “Trunk”.



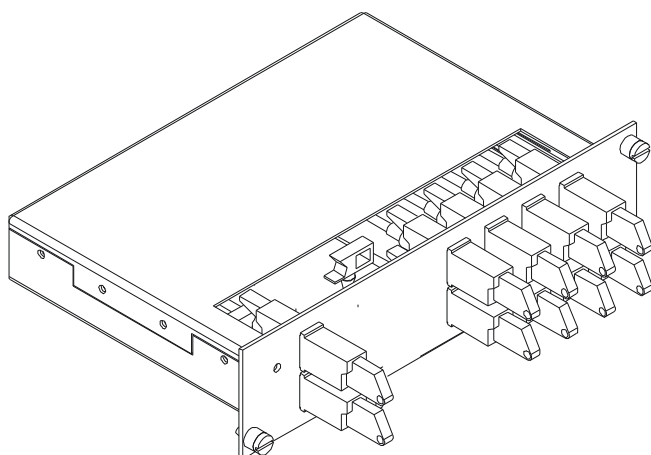
Please, note that the actual layout depends on the chosen connector type as well as other factors. However, the principal scheme stays the same.

Layout and dimensions (see also next page)

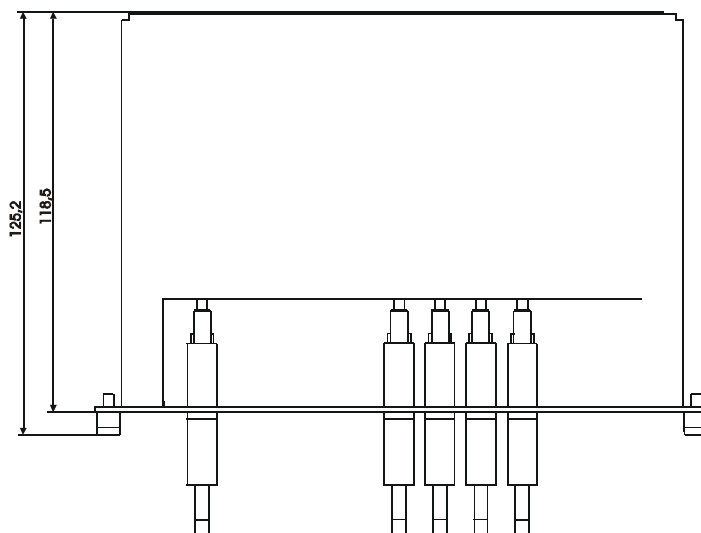
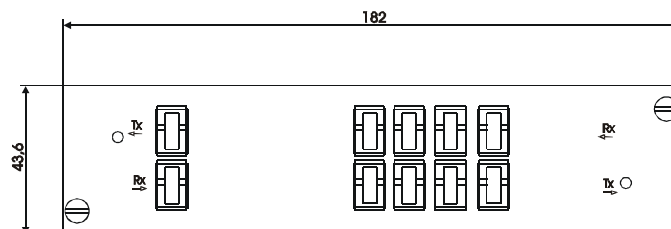
- Width: 166 / 182 mm
- Height: 25.75 / 44 mm
- Depth: 118.5 / 125.2 mm
- The color of the module is light gray
- All fonts and labels are printed in black.

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Please, note that the drawings shown here only show the dimensions and do not the specific configuration of the module!



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