

CWDM Multiplexer

Description

WDM Multiplexer module of TELNET allows to integrate up to 8 channels of information on a single pair of optical fiber. In this way, a fiber can carry multiple services. CWDM (Coarse Wave Division Multiplexing, G.694.2 from ITU-T) defines the wavelengths from 1270nm to 1610nm separated by 20 nm.

The Telnet-RI CWDM Mux works in wavelengths in bands S, C and L (1470nm to 1610nm).

Each of the optical carriers provides an independent optical channel which can carry any service: TDM, SDH, Gigabit, Fiberchannel, including 10G and 40G. This confers a high degree of flexibility and security in the development of optical network campus, metropolitan and regional.

The TELNET CWDM multiplexer solution is completely modular, allowing its use for the entire family of MiniSAE and MetroSAE TELNET chassis. Likewise, all marketed by TELNET optical adapters are compatible with the use of CWDM optical parts in GBIC, SFP and XFP format.

Migrating from CWDM

The TELNET solution allows hybrid CWDM-DWDM configurations. These solutions a DWDM and CWDM multiplexer work together in the same optical node. The DWDM multiplexers operate in reserved spectrum for the C and L bands, placing 8 DWDM channel per CWDM channels. These settings allow the migration to hybrid DWDM. This development protects part of the initial investment as it keeps the chassis, power supply system, management and all the service modules. Only requires the replacement of the multiplexer and the CWDM optics based on GBIC, SFP and XFP standard.

1 + 1 Optical Protection

If necessary, the output of TELNET CWDM Multiplexer can benefit from an optical system protection that guarantees service availability via two routes of fiber optics.



Features

Low insertion loss.

Less than 3.0 dB. Do not appreciably increase the total attenuation of the optical span.

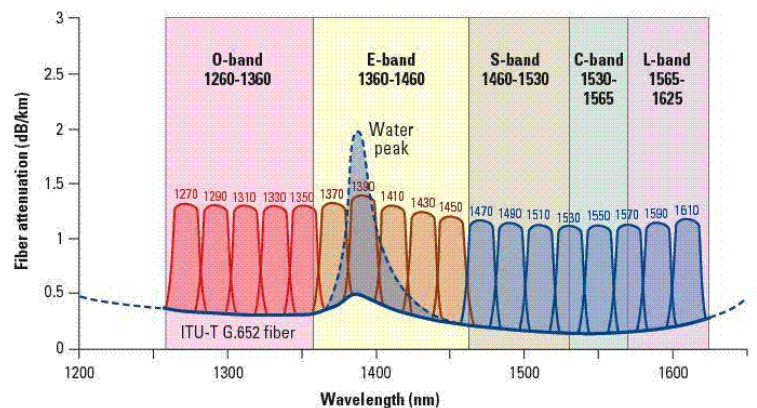
High isolation between channels.

Over 30 dB of isolation between adjacent optical channels minimizes the interference between channels.

Bidirectional.

Optical multiplexer and demultiplexer compact solution integrated in 1U module.

CWDM wavelength grid as specified by ITU-T G.694.2



Technical Specifications

Optical parameters	Typ.
Central Wavelength λ_c	1470—1610nm
Insertion loss of pass channel	$\leq 3,0$ dB
Adjacent Channel Isolation	≥ 30 dB
Optical Return Loss	≥ 45 dB
Directivity	≥ 55 dB

Mechanical

Connectorization as client's application (the most common, 8-channel bands S, C and L, connectorization FC-PC)

Dimensions 440x190x 44,1, mm

Weight 2.0 Kg.

Operating Temperature - 5° C ~ 65° C



CWDM Channels—S, C and L Bands

λ (nm)	Frequency (THz)
1470	204,0
1490	201,3
1510	198,6
1530	196,0
1550	193,5
1570	191,0
1590	188,6
1610	186,3

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