## M E L <br> B Y <br> E

Q3-S158 V3.1E

## Specification of CWDM

MUX/DEMUX $1 \times 4 / 1 \times 8$ for BOX
Module

Part Number: AWDR-Cxxx-xxxxx-00

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Coarse Wavelength Division Multiplexing（CWDM）is a type of optical wavelength management device that are based on proven ultra low－loss thin－film filter（TFF） technology．It features small size，high reliability，high extensibility，simultaneous transmission of multi－wavelength．CWDM has gained prevalence in multi－ wavelength digital transport architectures because it enables the use of very low cost uncooled distributed feedback（DFB）laser transmitters．Moreover，their powering requirements are reduced and reliability is increased．

Raycore provides whole series of $7 \times N$ CWDM products that are tailored for specific applications．All products meet GR－7209－CORE，GR－1221－CORE and ITU－T G．694．2 requirements．

## Features

－Low Insertion Loss
－High Isolation
－Low PDL
－Compact Design
－Good channel－to－channel uniformity
－Wide Operating Wavelength：From 1260nm to 1620 nm
－Wide Operating Temperature：From $-40^{\circ} \mathrm{C}$ to $85^{\circ} \mathrm{C}$
－High Reliability and Stability

## Applications

－CWDM System
－PON Networks
－CATV Links

## Compliance

－Telcordia GR－1209－CORE－2001
－Telcordia GR－1221－CORE－1999

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Specifications: 1×4 \& 1x8 CWDM Mux/Demux BOX Module

| Parameters |  | 7x4 | $7 \times 8$ |
| :---: | :---: | :---: | :---: |
| Center Wavelength (nm) |  | ITU, ITU+7 |  |
| Pass-Band (nm) |  | $1 T \cup \pm 6.5$ |  |
| Operating Wavelength ( nm ) |  | 1260~1620 |  |
| Channel Space (nm) |  | 20 |  |
| Fiber Type |  | SMF-28e or customer specified |  |
| IL ( dB ) |  | 2.0 | 2.8 |
| Isolation (dB) | Adjacent Channel | 30 |  |
|  | Non-Adjacent Channel | 50 |  |
| Ripple (dB) |  | 0.4 | 0.5 |
| PDL (dB) |  | 0.2 |  |
| PMD (ps) |  | 0.1 |  |
| RL (dB) |  | 45 |  |
| Directivity ( dB ) |  | 50 |  |
| Maximum Optical Power (mw) |  | 500 |  |
| Operating Temperature ( ${ }^{\circ} \mathrm{C}$ ) |  | -40~85 |  |
| Storage Temperature ( ${ }^{\circ} \mathrm{C}$ ) |  | -40~85 |  |
| BOX Package (mm) |  | 100*80*10 |  |

## Mechanical Dimensions




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Ordering Information

| Part Number | Description |
| :--- | :--- |
| AWDL-CM4X-XXXXX-00 | $7 \times 4$ CWDM MUX for BOX Module |
| AWDL-CD4X-XXXXX-00 | $7 \times 4$ CWDM DEMUX for BOX Module |
| AWDL-CM8X-XXXXX-00 | $7 \times 8$ CWDM MUX for BOX Module |
| AWDL-CD8X-XXXXX-00 | $7 \times 8$ CWDM DEMUX for BOXModule |

## AWDR-Cxx $\underline{x}-\underline{x x} \underline{x} \underline{x x}-00$

Option:
A B
C D

Option A: Connector Type ( x )
Option B: CWDM Wavelength ( $x \times$ ), ex: B] show is 1470 nm to 1610 nm ( $\times 8$ channel).
Option C: Fiber Type (x)
Option D: Fiber Length (xx)

| Connectors | CWDM Channel \# |  | Fiber type | Length |
| :---: | :---: | :---: | :---: | :---: |
| $\square$ | $\square \square$ |  | $\square$ | - |
| 1: SC/PC | 1:1270nm | 1:1270nm | 9:900 $\quad$ m | 01: 10 cm |
| 2: SC/APC | 2:1290nm | 2: 1290 nm | 2: 2 mm |  |
| 3: LC/PC | 3:1310nm | 3: 1310 nm | 3: 3 mm | 05: 50 cm |
| 4: LC/APC | 4:1330nm | 4:1330nm |  |  |
| 7: FC/PC | 5:1350nm | 5:1350nm |  | 10: 7M |
| 8: FC/APC | 6:1370nm | 6:1370nm |  |  |
| O: no connector | 7: 1390 nm | 7:1390nm |  | 15: 7.5 M |
|  | 8:1410nm | 8:1410nm |  |  |
|  | 9:1430nm | 9: 1430 nm |  | 20: 2 M |
|  | A: 1450 nm | A: 1450 nm |  |  |
|  | B: 1470 nm | B: 1470 nm |  | 90: 9M |
|  | C: 1490 nm | C: 1490 nm |  |  |
|  | D: 1510 nm | D: 1510 nm |  |  |
|  | E: 1530 nm | E: 1530 nm |  |  |
|  | F: 1550 nm | F: 1550 nm |  |  |
|  | $\mathrm{G}: 1570 \mathrm{~nm}$ | $\mathrm{G}: 1570 \mathrm{~nm}$ |  |  |
|  | H: 1590 nm | $\mathrm{H}: 1590 \mathrm{~nm}$ |  |  |
|  | J: 1610 nm | J: 1610 nm |  |  |
|  | XX: Customer specified |  |  |  |

