

# PRODUCT ENGINEERING SPECIFICATION

**Product Name:** 8+1 CWDM Mux/Demux 1U Rack

**Product Number:** NCWDM-08-MD-27-19-G-CH2741

**Product Description:** 8+1 CWDM Mux/Demux  
8 Wavelength: 1270-1410nm  
Connector: COM:FC/UPC  
OUT:LC/UPC, 1U 19" Rack



## 8+1 CWDM Mux/Demux 1U Rack

### 1. Product Description:

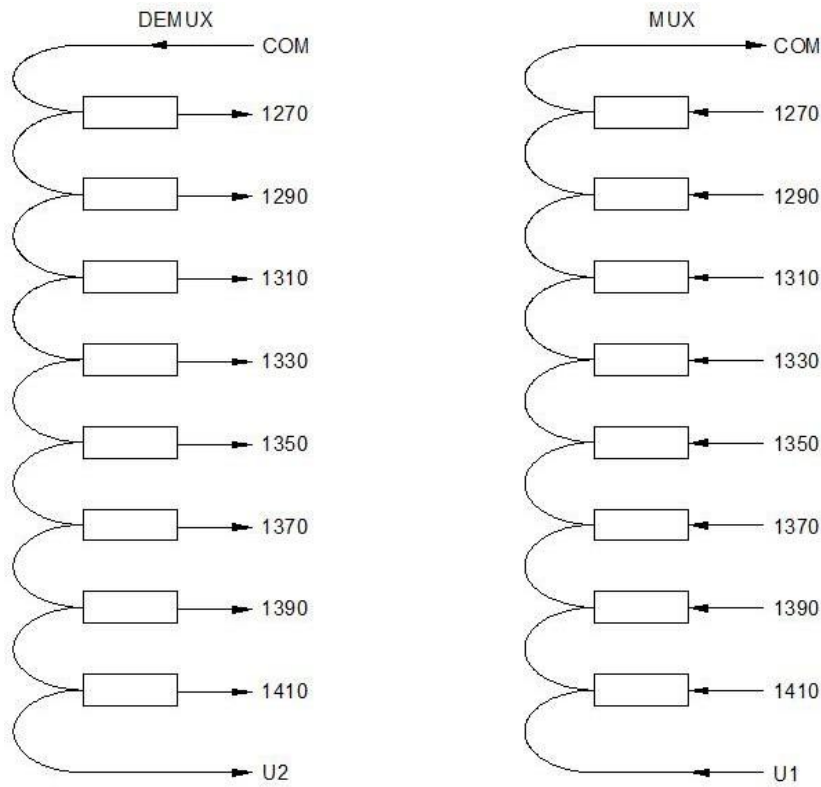
**Description:** 8+1 CWDM Mux/Demux, Fiber Type: SMF-28e, Wavelength: 1270-1410nm, EXP Port: 1430-1610 nm, Package: 1U 19" Rack, Connector: FC/UPC and LC/UPC.

### 2. Specifications:

Parameter	Unit	Value
Channel Number	CH	8+1
Operation Wavelength	nm	1260 ~ 1620
Channel Central Wavelength	nm	1270, 1290...1390, 1410
EXP Port Wavelength	nm	1430-1610 nm
Channel Space	nm	20
Channel Passband	nm	$\lambda@ITU\pm 6.5/CWDM$
Passband @-0.5dB	nm	$\geq 14$
Reflection-band	nm	$1260\sim(\lambda_c-12.5) \& (\lambda_c+12.5)\sim 1620$
Insertion Loss (Typ.)	dB	2.6
Insertion Loss (Max.)	dB	3.0
Adjacent Channel Isolation	dB	$\geq 30$
Non-adjacent Channel Isolation	dB	$\geq 45$
Monitor Channel Isolation	dB	$> 15$
Passband Ripple	dB	$\leq 0.30$
Return Loss	dB	$\geq 50$
Polarization Mode Dispersion (PMD)	ps	$\leq 0.20$
Polarization Dependent Loss (PDL)	dB	$\leq 0.10$
Power Handling	mW	$< 500$
Connector Type	-	COM:FC/UPC OUT:LC/UPC
Operation Temperature	°C	-20 ~ +85
Storage Temperature	°C	-40 ~ +85
Fiber Type	--	SMF-28E
Package Dimension	mm	1U chassis :432×44×200

Note: The above parameter is without connector. If with connector, IL will increase by 0.3dB.

### 3. Optical Path Diagram



Part Number	Mux Port	Demux Port
NCWDM-08-MD-27-19-1310	1270nm	1410nm
	1290nm	1390nm
	1310nm	1370nm
	1330nm	1350nm
	1350nm	1330nm
	1370nm	1310nm
	1390nm	1290nm
	1410nm	1270nm

#### 4. Outline Drawing (unit: mm):



#### 5. Label Diagram:



#### 6. Test Report:

The test report should be provided when the products are delivered. Following characteristic test data should be included:

- Insertion Loss (Port1-Port8)
- Adjacent Channel Isolation
- Isolation
- PDL

## 7. Packaging:

Following items should be indicated on the outer packaging surface:

Product Name

Product Number

Serial Number (SN bar code)

