

100G MUX/DEMUX MODULE

Multiplexer (mux) modules combine several wavelengths into a single fiber, and demultiplexer (demux) modules separate the wavelengths by cascading a set of thin-film filter-based 3-port cylindrical devices. Coherent's 100G mux/demux module enables simultaneous transmission of optical signals operating at different wavelengths over a single fiber and increases the capacity of fiber-optical transmission systems. The 100G wavelength is the wavelength grid defined by the ITU. Coherent is capable of providing flexible package form factors including LGX, flat box, fiber tray, and rack mount.



FEATURES

- Low insertion loss
- Excellent channel isolation
- Epoxy-free optical path
- Telcordia compliant
- 4-, 8-, 16-, 24-, 32-, 40-, and 48-channel configurations
- RoHS 6 compliant

APPLICATIONS

- DWDM systems
- CATV systems

Specifications ^{1,2}

Parameter		Unit	Grade "A"			
Channel Spacing			100 GHz			
Number of Channels			4	8	16/24	32/40/48
Central Wavelength ³ (λ_c)		nm	1529.55~1560.61 ITU grid			
Passband		Min.	ITU ± 0.11			
Isolation	Adjacent Channel	Min.	28			
	Nonadjacent Channel	Min.	40			
Insertion Loss		Max.	2	2.8	4	5
Ripple in Passband		Max.	0.5			
Directivity		Min.	50			
Polarization-Dependent Loss		Max.	0.15	0.15	0.2	0.3
Return Loss		Min.	45			
Fiber Type			G652D, G657A1, or equivalent			
Fiber Length ⁴		m	1.0 ± 0.1			
Power Handling		Max.	500			
Operating Temperature		$^{\circ}\text{C}$	0~70			
Storage Temperature		$^{\circ}\text{C}$	-40~85			
Box Package	Length	mm	120	120	120	150
	Width	mm	80	80	80	110
	Height	mm	9	9	15	23
LGX Package ⁵			1 U	2 U	4 U	8 U
19" Rack Mount Package ⁵			1 U	1 U	1 U	1 U

¹ All specifications include the effect of operating temperature and polarization state.

² Values referenced are without connectors. Insertion loss for a connector pair is 0.20 dB (typ.) and 0.30 dB (max.).

³ An L-band DWDM module is available upon request.

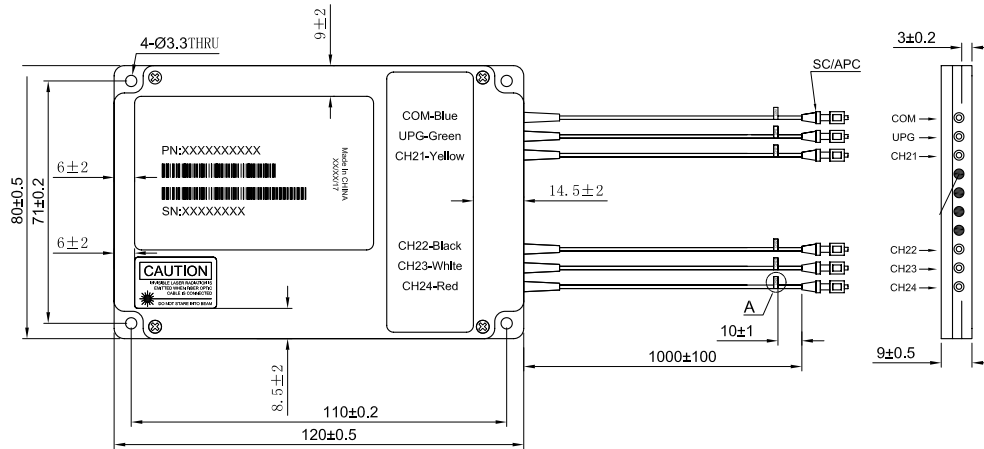
⁴ Fiber length includes rubber boot and excludes the connector.

⁵ LGX and 19" rack mount packages are designed according to industry standard.

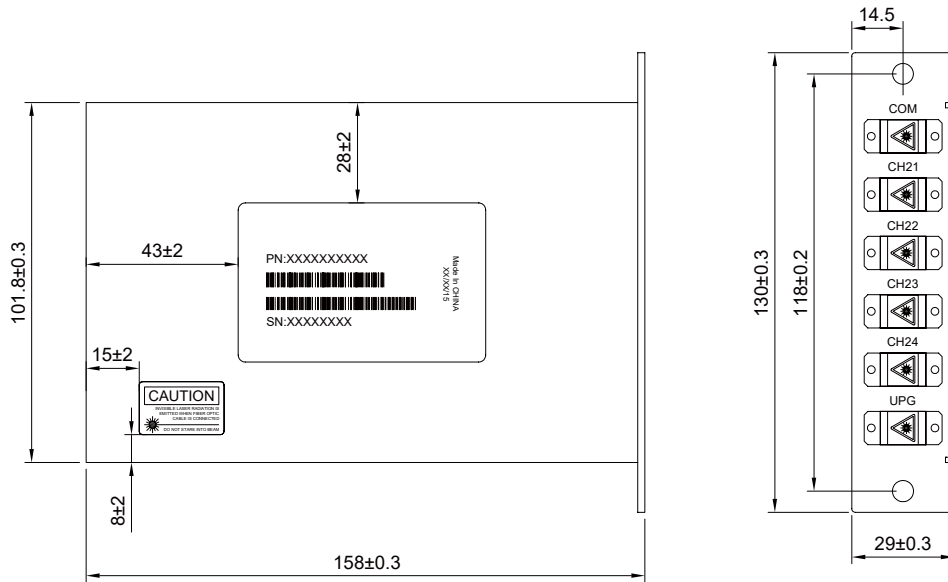
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Dimensions (Unit: mm)

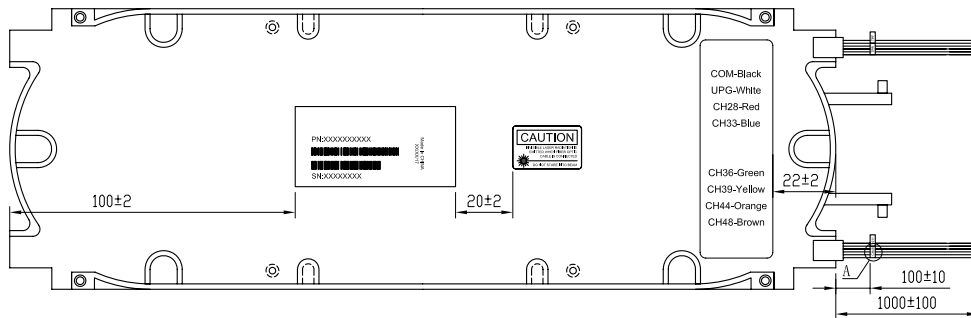
Box Package



LGX Package



Tray Package



Ordering Information

DWDM - 100 - X - XX - XXXX - XXXX - X - XX - X
 A B C D E F G

A	Grade	A = grade "A"
		S = custom
B	Number of Channels	04 = 4 channels
		08 = 8 channels
		16 = 16 channels
		...
C	Initial Channel	CH21 = 21st channel
		.
		.
		CH59 = 59th channel
D	Fiber Type ¹	900L = 900 μm loose tube
		900T = 900 μm tight buffer
E	Mux/Demux	M = mux
		D = demux
		C = mux and demux ²
F	Connector	NN = without connector
		XY = with connector ³
G	Package	B = box package
		L = LGX
		R = rack mount

¹ 2 mm or 3 mm cable is available upon request.

² Please specify the function sketch and outline drawing for mux and demux integration package when ordering.

³ Please specify the type of connector when ordering (see below).

X	0	1	2	3	4	5
Mechanical Type	Other	SC	FC	ST	MU	LC
Y	0	1	2	3		
Physical Contact Type	Other	PC	UPC	APC		