DWDM-1000

100GHz Dense Wavelength Division Multiplexer

PRODUCT DESCRIPTION

DWDM series is based on mature thin film filtering technology and adopt metal sealing technology to encapsulate. It has the feature of flat channel bandwidth, flexible channel configuration, low insert loss and high isolation. The flexibility of channel configuration and modularized design make it convenient for system upgrading and expanding. All the Huatai products have no epoxy glue in optical line and can be used in high power optical communication system.

DWDM-1000M: 100GHz (0.8nm) Mux.

DWDM-1000D: 100GHz (0.8nm) Demux.

PRODUCT FEATURE

- ▶100G channel spacing (DWDM-1000)
- ▶High channel isolation
- ▶Low insertion loss
- ▶High stability, high reliability
- ▶No epoxy glue in optical line
- ▶Compact structure

MAIN APPLICATION

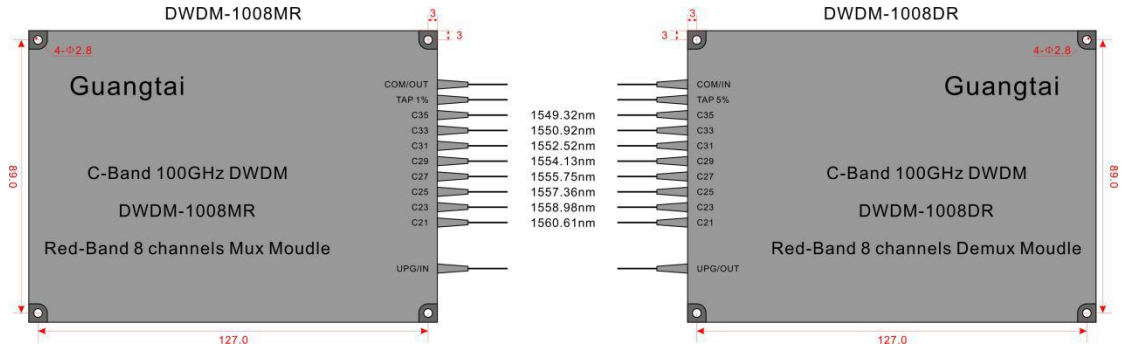
- ▶Main trunk DWDM system
- ▶MAN DWDM system
- ▶CATV
- ▶FTTx PON
- ▶FTTH for satallite TV
- ▶Laboratory application

TECHNIQUE INDEX

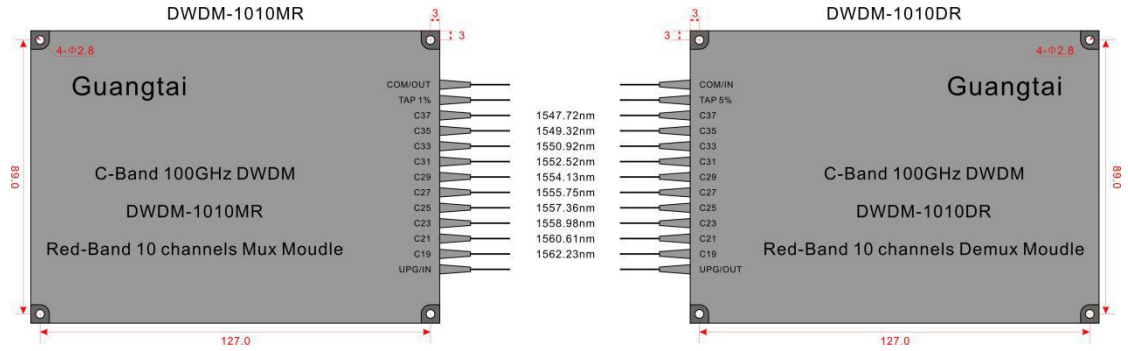
Performance				Index	Supplement
Operating wavelength range	C-Band		(nm)	1528.77~1563.86	
	L-Band			1569.59~1604.03	
Operating center wavelength			(nm)	ITU Grid 100GHz	
Center wavelength accuracy			(nm)	±0.03	
Channel spacing			(GHz)	100	
Channel passband (@-0.5dB bandwidth)			(nm)	ITU±0.11	
Insertion loss over passband			(dB)	≤3.0	1008
				≤5.2	1016
				≤10.0	1032
Channel ripple			(dB)	≤0.5	
Isolation	Adjacent		(dB)	≥25	
	Non-adjacent			≥35	
Polarization dependent loss			(dB)	≤0.15	
Polarization mode dispersion			(ps)	≤0.10	
Directivity			(dB)	≥50	
Return loss			(dB)	≥50	
Power handling			(mW)	≥500	
Connector type				No	
Fiber length			(m)	≥1.0	
Fiber type				SMF-28e with 900μm loose tube	
Operating temperature			(℃)	0~+70	
Storage temperature			(℃)	-40~+85	
Dimensions	Moduletor		(mm)	120×80×12	1008, 1016
				142×115×14.5	1032
	Stander	1U	(")	19×10.7×1.75	
		2U		19×10.7×3.5	

STAPLE C-BAND 100GHZ DWDM

Red-Band 8 channels Mux/Demux

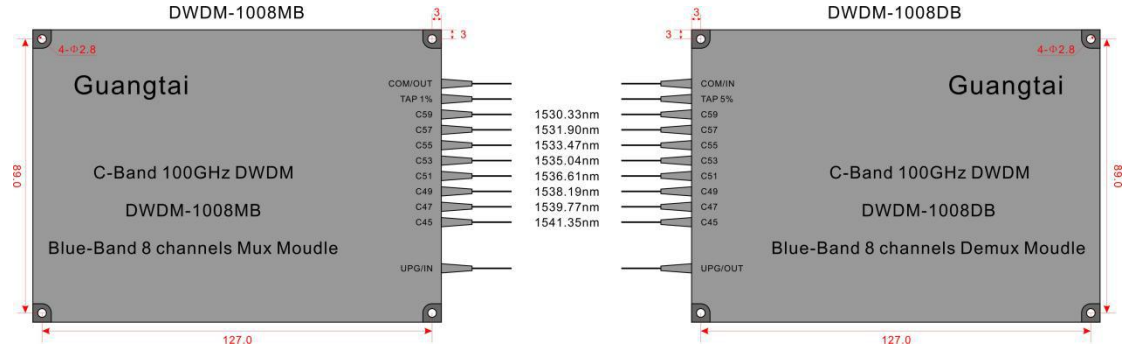


Red-Band 10 channels Mux/Demux

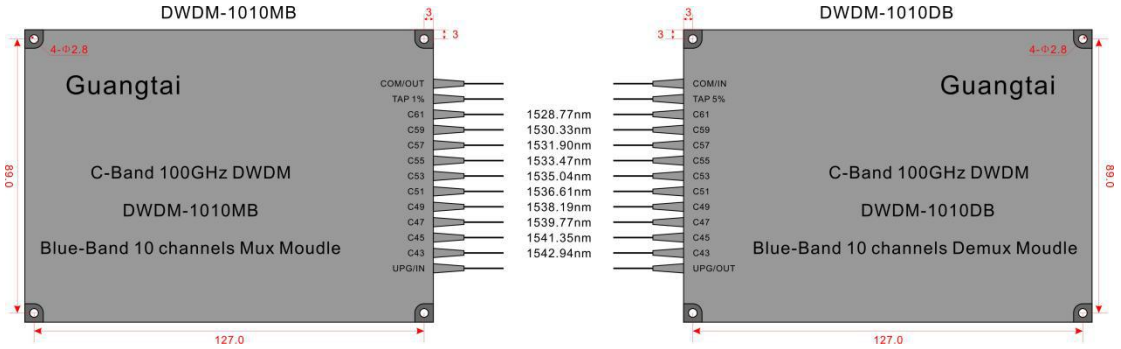


Remark: DWDM-1009MR, DR is lack of C19 wavelength compared with DWDM-1010MR, DR

Blue-Band 8 channels Mux/Demux

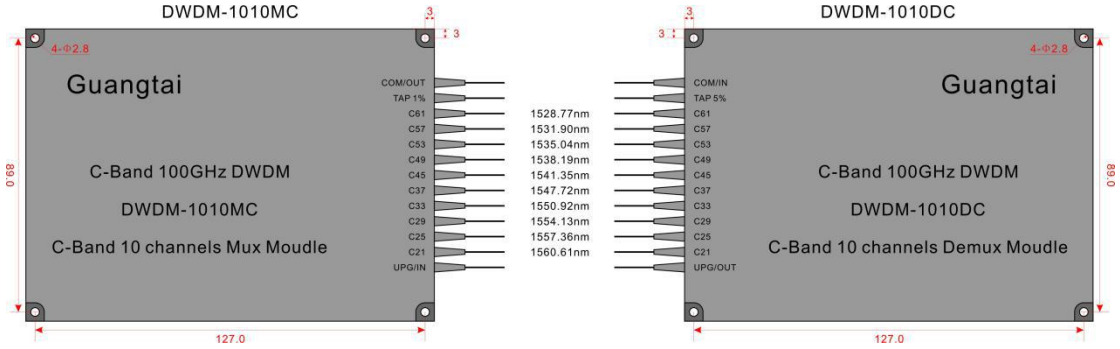


Blue-Band 10 channels Mux/Demux

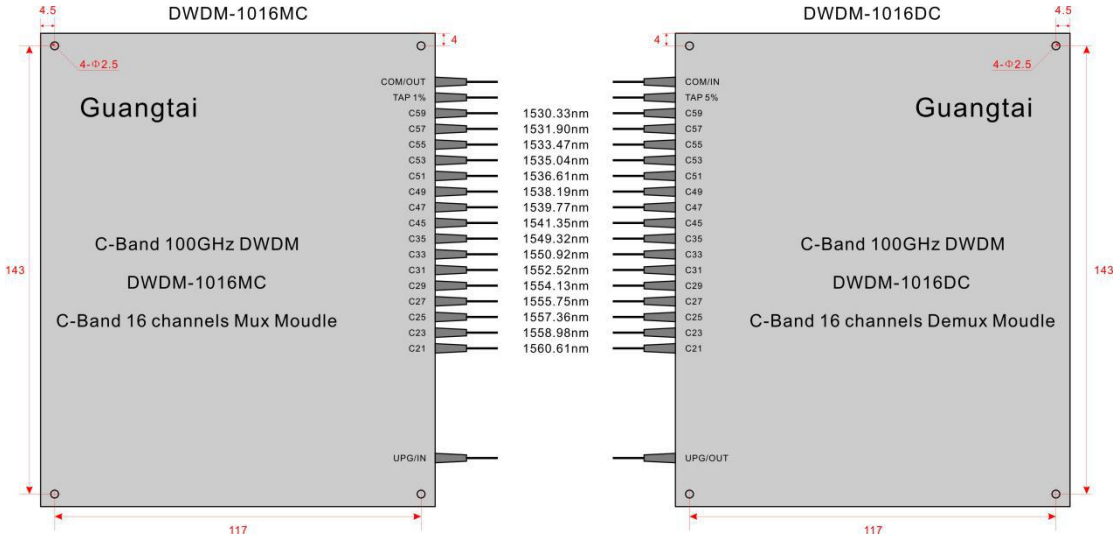


Remark: DWDM-1009MB, DB is lack of C61 wavelength compared with DWDM-1010MB, DB

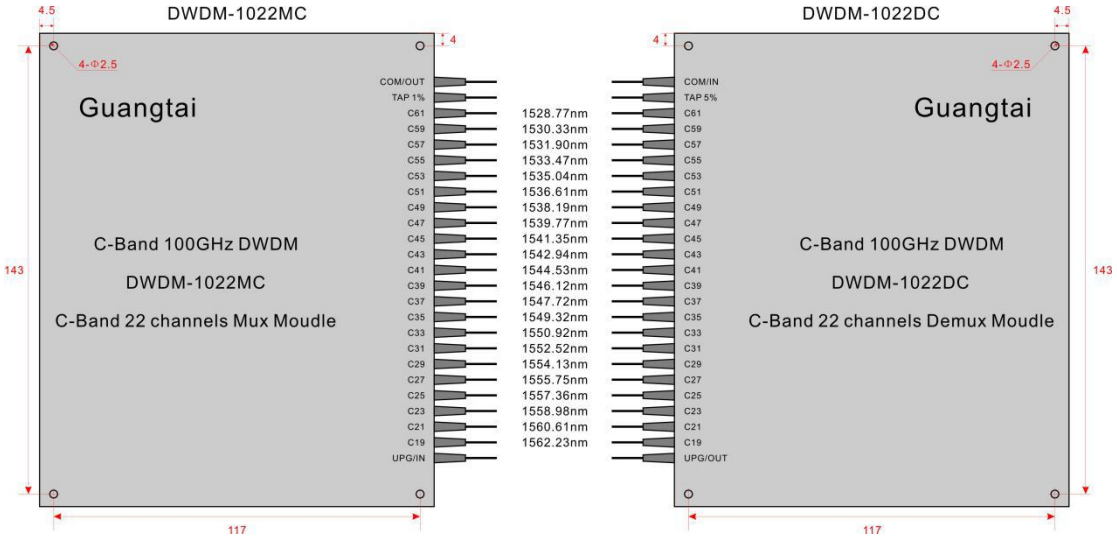
C-Band 10 channels Mux/Demux



C-Band 16 channels Mux/Demux



C-Band 22 channels Mux/Demux



Remark: 1. DWDM-1020MC, DC is lack of two wavelengths C41 and C39 compared with DWDM-1022MC, DC.

2. DWDM-1018MC, DC is lack of four wavelengths C61, C41, C39 and C19 compared with DWDM-1022MC, DC.

PRODUCT SERIES

Common C/Red-Band 100GHz DWDM

Model number	Mux/Demux	Number of channels	Channel configuration									
DWDM-1004MR/1	Mux	4	C37	C35			C29			C23		
DWDM-1004DR/1	Demux											
DWDM-1004MR/2	Mux				C33	C31		C27	C25			
DWDM-1004DR/2	Demux											
DWDM-1004MR/3	Mux		C36	C34	C32			C26				
DWDM-1004DR/3	Demux											
DWDM-1005MR/1	Mux	5			C33	C31	C29			C23	C21	
DWDM-1005DR/1	Demux											
DWDM-1005MR/2	Mux				C33	C31		C27	C25		C21	
DWDM-1005DR/2	Demux											
DWDM-1008MR/1	Mux	8		C35	C33	C31	C29	C27	C25	C23	C21	
DWDM-1008DR/1	Demux											
DWDM-1009MR/1	Mux	9	C37	C35	C33	C31	C29	C27	C25	C23	C21	
DWDM-1009DR/1	Demux											
DWDM-1010MR/1	Mux	10	C37	C35	C33	C31	C29	C27	C25	C23	C21	C19
DWDM-1010DR/1	Demux											

Common C/Blue-Band 100GHz DWDM

Model number	Mux/Demux	Number of channels	Channel configuration									
DWDM-1004MB/1	Mux	4	C61	C59		C55	C53					
DWDM-1004DB/1	Demux											
DWDM-1004MB/2	Mux				C57			C51	C49	C47		
DWDM-1004DB/2	Demux											
DWDM-1004MB/3	Mux		C60	C58	C56	C54						
DWDM-1004DB/3	Demux											
DWDM-1005MB/1	Mux	5	C61	C59		C55	C53				C45	
DWDM-1005DB/1	Demux											
DWDM-1005MB/2	Mux				C57			C51	C49	C47	C45	
DWDM-1005DB/2	Demux											
DWDM-1008MB/1	Mux	8		C59	C57	C55	C53	C51	C49	C47	C45	
DWDM-1008DB/1	Demux											
DWDM-1009MB/1	Mux	9	C61	C59	C57	C55	C53	C51	C49	C47	C45	
DWDM-1009DB/1	Demux											
DWDM-1010MB/1	Mux	10	C61	C59	C57	C55	C53	C51	C49	C47	C45	C43
DWDM-1010DB/1	Demux											

Common C-Band 100GHz DWDM

Model number	Mux/ Demux	Number of channels	Channel configuration										
DWDM-1010MC/1	Mux	10	C6		C5		C5		C4		C4		
DWDM-1010DC/1	Demux			C3		C3		C2		C2		C2	
DWDM-1016MC/1	Mux	16		C5	C5	C5	C5	C5	C4	C4	C4		
DWDM-1016DC/1	Demux				C3	C3	C3	C2	C2	C2	C2	C2	
DWDM-1018MC/1	Mux	18		C5	C5	C5	C5	C5	C4	C4	C4	C4	
DWDM-1018DC/1	Demux			C3	C3	C3	C3	C2	C2	C2	C2	C2	
DWDM-1020MC/1	Mux	20	C6	C5	C5	C5	C5	C5	C4	C4	C4	C4	
DWDM-1020DC/1	Demux			C3	C3	C3	C3	C2	C2	C2	C2	C2	C19
DWDM-1022MC/1	Mux	22	C6	C5	C5	C5	C5	C5	C4	C4	C4	C4	C41
DWDM-1022DC/1	Demux		C3	C3	C3	C3	C3	C2	C2	C2	C2	C2	C19

MODEL EXPLANATION

DWDM – 10 □□ □ □ / □ – T□ / [S][A] – [1][U] – [F]

Product series	Channel spacing		Number of channel		Type		Range of wavelength		Channel configuration code		Monitor port		Connector		Exterior		Optical port position	
Dense WDM	10	100GHz	04	4 channels	M	Multiplexing	C	C-Band	1	1# configure	T0	Without	FA	FC/APC	1U	19" 1RU	F	Front panel
	05	50GHz	05	5 channels	D	Demultiplexing	B	C-Band Blue-Band	2	2# configure	T1	TAP 1%	FP	FC/UPC	2D	Desk-type	B	Back panel
			08	8 channels					3	3# configure	T5	TAP 5%	SA	SC/APC	ML	Modulator		
			09	9 channels			R	C-Band Red-Band	4	4# configure			SP	SC/UPC	OEM	Appearance user customized		
			10	10 channels									LA	LC/APC				
			16	16 channels			W	C&L-Band					LP	LC/UPC				
			18	18 channels			L	L-Band										
			20	20 channels			b	L-Band Blue-Band										
			22	22 channels														
			XX	XX channels			r	L-Band Red-Band										