



*For the Best*

## **20MM-DWDM-1005-1U**

100GHz Dense Wavelength Division Multiplexer  
950MHz~2400 MHz

Technical Specification

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## **1.0 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.

20MM-DWDM-1000M: 100GHz (0.8nm) Mux.

20MM-DWDM-1000D: 100GHz (0.8nm) Demux.

## **2.0 Product feature**

- 100G channel spacing (20MM-DWDM-1000)
- High channel isolation
- Low insert loss
- High stability, high reliability
- No epoxy glue in optical line
- Compact structure

## **3.0 Main application**

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

## 4.0 Technical index

Performance			Index	Supplement	
			20MM-DWDM-1000		
Operating wavelength rage	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		
Passband insert loss		(dB)	≤3.0	1008	
			≤5.2	1016	
			≤10.0	1032	
Channel ripple		(dB)	≤0.5		
Isolation	Adjacent	(dB)	≥25		
	Non-adjacent		≥35		
Polarization dependence 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		(°C)	0~+70		
Storage temperature		(°C)	-40~+85		
Dimensions	Modular		(mm)	120×80×12	1008, 1016
				142×115×14.5	1032
	Stander	1U	(")	19×10.7×1.75	
		2U		19×10.7×3.5	

## 5.0 Product series

### 5.1 Common C/Red-Band 100GHz DWDM

Model number	Mux/Demux	Number of channel	Channel configuration									
20MM-DWDM-1004MR/1	Mux	4	C37	C35			C29			C23		
20MM-DWDM-1004DR/1	Demux				C33	C31		C27	C25			
20MM-DWDM-1004MR/2	Mux											
20MM-DWDM-1004DR/2	Demux											
20MM-DWDM-1004MR/3	Mux			C36	C34	C32			C26			
20MM-DWDM-1004DR/3	Demux											
20MM-DWDM-1005MR/1	Mux	5			C33	C35	C29			C23	C21	
20MM-DWDM-1005DR/1	Demux											
20MM-DWDM-1005MR/2	Mux					C33	C31		C27	C25		C21
20MM-DWDM-1005DR/2	Demux											
20MM-DWDM-1008MR/1	Mux	8		C35	C33	C31	C29	C27	C25	C23	C21	
20MM-DWDM-1008DR/1	Demux											
20MM-DWDM-1009MR/1	Mux	9										
20MM-DWDM-1009DR/1	Demux			C37	C35	C33	C31	C29	C27	C25	C23	C21
20MM-DWDM-1010MR/1	Mux	10										
20MM-DWDM-1010DR/1	Demux			C37	C35	C33	C31	C29	C27	C25	C23	C21

### 5.2 Common C/Blue-Band 100GHz DWDM

Model number	Mux/Demux	Number of channel	Channel configuration									
20MM-DWDM-1004MB/1	Mux	4	C61	C59		C55	C53					
20MM-DWDM-1004DB/1	Demux											
20MM-DWDM-1004MB/2	Mux					C57			C51	C49	C47	
20MM-DWDM-1004DB/2	Demux											
20MM-DWDM-1004MB/3	Mux			C60	C58	C56	C54					
20MM-DWDM-1004DB/3	Demux											
20MM-DWDM-1005MB/1	Mux	5	C61	C59		C55	C53				C45	
20MM-DWDM-1005DB/1	Demux											
20MM-DWDM-1005MB/2	Mux					C57			C51	C49	C47	C45
20MM-DWDM-1005DB/2	Demux											
20MM-DWDM-1008MB/1	Mux	8										
20MM-DWDM-1008DB/1	Demux				C59	C57	C55	C53	C51	C49	C47	C45
20MM-DWDM-1009MB/1	Mux	9										
20MM-DWDM-1009DB/1	Demux			C61	C59	C57	C55	C53	C51	C49	C47	C45
20MM-DWDM-1010MB/1	Mux	10										
20MM-DWDM-1010DB/1	Demux			C61	C59	C57	C55	C53	C51	C49	C47	C45

### 5.3 Common C-Band 100GHz DWDM

Model number	Mux/Demux	Number of channel	Channel configuration										
20MM-DWDM-1010MC/1	Mux	10	C61		C57		C53		C49		C45		
20MM-DWDM-1010DC/1	Demux			C37		C33		C29		C25		C21	
20MM-DWDM-1016MC/1	Mux	16		C59	C57	C55	C53	C51	C49	C47	C45		
20MM-DWDM-1016DC/1	Demux				C35	C33	C31	C29	C27	C25	C23	C21	
20MM-DWDM-1018MC/1	Mux	18		C59	C57	C55	C53	C51	C49	C47	C45	C43	
20MM-DWDM-1018DC/1	Demux			C37	C35	C33	C31	C29	C27	C25	C23	C21	
20MM-DWDM-1020MC/1	Mux	20	C61	C59	C57	C55	C53	C51	C49	C47	C45	C43	
20MM-DWDM-1020DC/1	Demux			C37	C35	C33	C31	C29	C27	C25	C23	C21	C19
20MM-DWDM-1022MC/1	Mux	22	C61	C59	C57	C55	C53	C51	C49	C47	C45	C43	C41
20MM-DWDM-1022DC/1	Demux			C39	C37	C35	C33	C31	C29	C27	C25	C23	C21

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