

# MetroWAVE-5

## 4 + 2 - Channel CWDM Multiplexer with Monitor Port

- Simple optical multiplexing of up to 6 separate applications
- Expansion units available for supporting 9, 12 or 16 applications
- Voice, data, telemetry and CCTV can all be supported
- Any port can operate at any speed up to 10G
- Simple fibre plumbing to converge complex applications
- Legacy fibre products supported via the lower band port
- Long distance CWDM SFPs available
- Monitor ports available for non-invasive system debug
- Unpowered passive devices for highest possible reliability



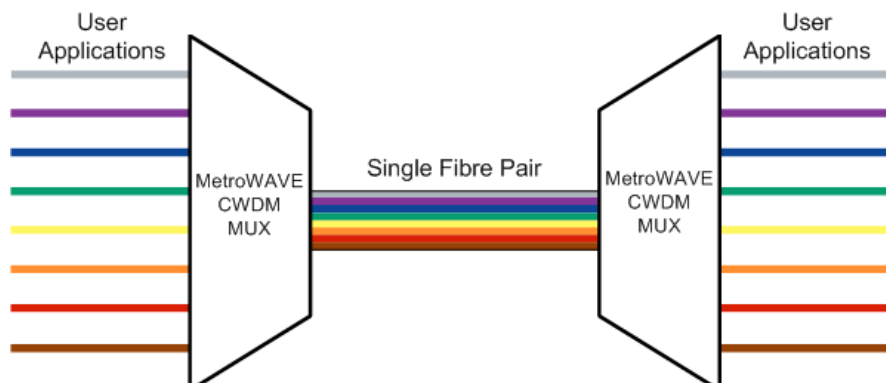
MetroWAVE-5

The MetroWAVE product range offers a series of passive CWDM optical multiplexing functions. CWDM multiplexing is a technique whereby different wavelengths of light are multiplexed together and transported over a singlemode fibre pair, then demultiplexed at the far end back into their original wavelengths.

The MetroWAVE product range performs these CWDM multiplexing and demultiplexing functions passively, i.e. directly optically without using any optical-electrical-optical conversions or repeater functions. This is now the most economic approach to CWDM multiplexing due to the widespread availability of cost effective long range vendor compatible CWDM SFPs. The unpowered, fixed mechanical nature of these MetroWAVE products offers greater robustness and higher levels of reliability than active devices offering similar functionality.

The MetroWAVE-5 operates in the upper CWDM band (1470nm-1530nm) with an expansion port for the rest of the upper band (1550nm-1610nm) and an expansion port for the lower CWDM band to support direct connection of legacy 1300nm non-CWDM equipment or for cascading to lower CWDM band (1270nm-1410nm) equipment.

Whilst the MetroWAVE product range is compatible with user exchangeable SFPs (and most other industry standard fibre transceivers), it is recommended that these are purchased from Metrodata for use in Metrodata fibre equipment to guarantee their specification and compatibility with each other.



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### Specifications

Optical Specification				
Parameter		Values		
		Min	Typical	Max
Operating Wavelength		1260nm		1620nm
Operating Centre Wavelength + upper CWDM band		Lower CWDM Band + 1471/1491/1511/1531nm		
Channel Number		1ch.(Lower CWDM Band) + 4(1471~1531nm)		
Passband Bandwidth	4ch. Port	$\lambda_c \pm 6.5\text{nm}$		
	Lower Band	$\lambda_c \pm 50\text{nm}$		
Insertion Loss	Mux (TX)	4ch. Port	1.8dB	2.3dB
		Lower Band	0.9dB	1.1dB
		Expansion	1.6dB	2.0dB
		Monitor 2%		19.7dB
	Demux (RX)	4ch. Port	1.8dB	2.3dB
		Lower Band	0.9dB	1.1dB
		Expansion	1.6dB	2.0dB
		Monitor 2%		19.7dB
Mux & Demux Link	4ch. Port	3.0dB	3.7dB	
	Lower Band	1.8dB	2.2dB	
Channel Isolation		30dB		
PDL				0.2dB
Directivity		50dB		
Return Loss		50dB		
Environment		Dimensions (W x L x H) mm		
Storage Temp	-40 to 85 deg C	MetroWAVE-rack	482 x 170 x 44	
Operating Temp	-5 to 75 deg C	MetroWAVE-5	142 x 170 x 39	
Humidity	95% RH, non-condensing	Power Supply		
Pressure	86 - 106 kPa	Power Consumption	Unpowered	
Compliance & Approvals				
Safety	EN60950			
EMC	EN55022, EN50082			

data sheet MetroWAVE-5

### Order Codes

Product	Part Number
MetroWAVE-5	80-32-002
MetroWAVE-rack	80-32-051

For more data on Metrodata products, visit our website at [www.metrodata.co.uk](http://www.metrodata.co.uk)  
 Metrodata reserves the right to change specifications without notice.  
 Please check when ordering.