

# MetroWAVE-9

## 8 + 1 - Channel CWDM Multiplexer with Monitor Port

- Simple optical multiplexing of up to 9 separate applications
- Expansion unit available for supporting 16 CWDM 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



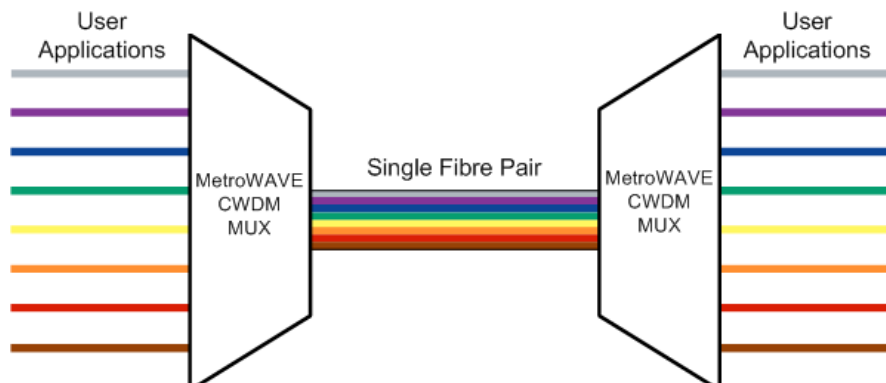
MetroWAVE-9

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-9 operates in the upper CWDM band (1470nm-1610nm) with 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		
Operating Centre Wavelength	Lower CWDM Band + 1471/1491/1511/1531/1551/1571/1591/1611nm		
Channel Number	1ch.(Lower CWDM Band) + 8(1471~1611nm)		
Passband Bandwidth	8ch. Port	$\lambda_c \pm 6.5\text{nm}$	
	Lower Band	1264.5~1417.5nm	
Insertion Loss	Mux (TX)	8ch. Port	3.5dB
		Lower Band	1.1dB
		Monitor 2%	19.7dB
	Demux (RX)	8ch. Port	3.5dB
		Lower Band	1.1dB
		Monitor 2%	19.7dB
Mux & Demux Link	8ch. Port	4.9dB	
	Lower Band	2.2dB	
Channel Isolation	30dB		
PDL			0.2dB
PDM			0.1ps
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-9	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-9

### Order Codes

Product	Part Number
MetroWAVE-9	80-32-012
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.