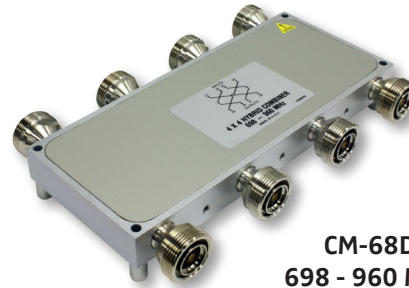


- ◆ Connects 4 inputs to 4 outputs
- ◆ Up to 30 dB Isolation, Low VSWR
- ◆ Guaranteed Low PIM, -155 dBc
- ◆ Indoor and Outdoor Applications
- ◆ 100W/Input Avg Power Rating
- ◆ Same DIN Connector Spacing
- ◆ RoHS compliant



CM-68D
698 - 960 MHz

The 4x4 Hybrid is a matrix of four 3 dB Hybrid Couplers arranged so that signals applied to any of the four inputs will be split equally between the four outputs. This allows simple combining of multiple signals in the same wireless band to a common feeder cable, as might be required in a neutral host in-building distributed antenna system, or the decoupled combining of 4 transmitter or receiver signals equally to 4 antennas. Unused ports must be terminated externally in 50Ω, with an appropriate PIM performance. Note that the phase relationship of the outputs in these models is not consistent.

Special attention has been directed in these versions to maximize isolation in the wireless bands and minimize passive intermodulation (PIM). Units may be moisture sealed for outside applications to meet IP67. (11/14)

Impedance: 50Ω nominal
Environment: -40 to +55°C, IP64 (IP67 to order)
PIM, Intermod: <-155 dBc (two 20W tones)-165 dBc typical
Finish:
Enclosure: Passivated Al.
Connectors: Triplate, 7-16 (f) Female standard

Model Number	Frequency Range, MHz	Coupling dB	Input Isolation* typical	min	Return Loss, dB	Power per Input Avg.	Peak	Weight, nom. lbs. (kg)
CM-58D	1710 - 2700	6.2 ± 0.8	27 dB	25 dB	>23 dB	100W	3kW	4.9 (2.2)
CM-68D	698 - 960	6.2 ± 0.6	32 dB	28 dB	>23 dB	100W	3kW	3.3 (1.5)
CM-88D	698 - 800	6.0 ± 1.8	23 dB	20 dB	>18 dB	100W	3kW	4.9 (2.2)
	800 - 2600 2600 - 2700	6.2 ± 1.2 6.4 ± 1.4						
CM-98D	350 - 380	6.0 ± 0.8	33 dB	30 dB	>25 dB	100W	3kW	3.5 (1.6)
	380 - 520	6.1 ± 0.6						

*Requires all unused ports to be terminated with loads of return loss > 32dB

DC Paths

All paths DC Isolated except:
Input 1 to Output 1
Input 2 to Output 2
Input 3 to Output 3
Input 4 to Output 4

Model Number	Dimensions inches (mm)	
	A	B
CM-58D	4.94 (125.5)	4.54 (115.3)
CM-68D	3.70 (93.93)	3.30 (83.77)
CM-88D	4.99 (126.7)	4.59 (116.6)
CM-98D	3.91 (99.31)	3.51 (89.20)

