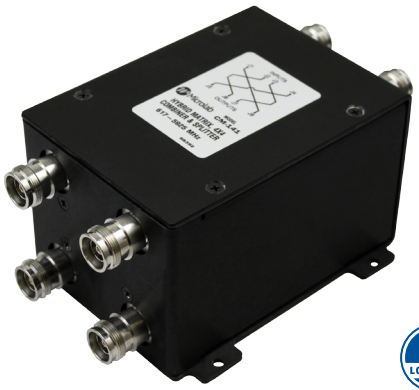
4 x 4 Hybrid Combiner, CM-141E

Ultra-wideband Compact Hybrid Combiner
617-5,925 MHz, 4.3-10
Rev. D

- Ultra-wideband for 5G Small Cell and D-RAN applications
- Guaranteed Low PIM
- High Isolation and Low VSWR
- 100 Watt per Input Continuous Average Power up to 2.6 GHz†
- IP67 Rated
- RoHS compliant



Microlab CM-141E hybrid combiner has been designed for wideband 5G deployments. The CM-141E covers an ultra-wide bandwidth of 617 - 5,925 MHz with small size for easier concealment. The hybrid combiner is most commonly is used to combine up to four wireless carriers in the operating band to multiple antenna feeds or distribution cables. Unused input and output ports should be terminated with low PIM loads.

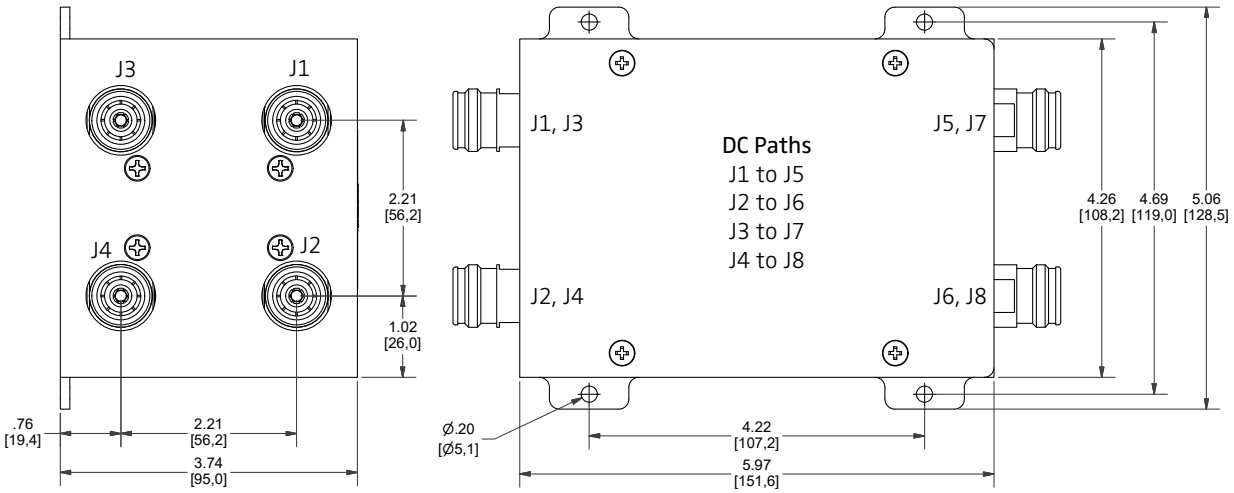
VSWR and isolation have been optimized while passive intermodulation (PIM) is minimized. Input and output connectors have been separately grouped for convenient connection and each connector is spaced to allow controlled wrench tightening of connectors. Also available in rack mount configuration as CM-141E-2R for 2x2 MIMO and CM-141E-4R for 4x4 MIMO.

Frequency:	617-5925 MHz
PIM:	-160 dBc (-117 dBm) min. (Tested with 2 tones at +43 dBm)
Power:	100W up to 2.6 GHz† 3kW peak
Impedance:	50Ω nom.
Environment:	-15°C to +65°C, IP67
Housing:	Passivated aluminum
Connectors:	4.3-10 Triplate, (f-f)
Weight:	5 lbs (2.3 kg)

† De-rated by 12 W per 1 GHz from 2.6 to 5.925 GHz (max 60 Watts/input at 5.925 GHz)

Model	Frequency Range, MHz	Isolation dB	Coupling dB	VSWR Max
CM-141E	617 - 698	>25	6.5 ± 2.0	1.25:1
	698 - 1500	>25	6.5 ± 1.2	1.25:1
	1500 - 2700	>22	6.5 ± 1.2	1.25:1
	2700 - 3800	>20	6.5 ± 1.2	1.30:1
	3800 - 4800	>18	6.8 ± 1.6	1.50:1
	4800-5150	>18	6.8 ± 1.6	1.65:1
	5150-5925	>18	6.8 ± 1.6	1.50:1

Mechanical Outline



Dimensions in inches[mm]

Note: Specifications are subject to change without prior notification.

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