



3x3 Hybrid Coupler, CM-81 series

Three Way, Low Loss, 4.8 dB Hybrid Combiner
700 - 2,700 MHz, N or 7-16 mm connectors

- ◆ Connects 3 inputs to 3 outputs with minimal interaction & PIM
- ◆ Just 4.8 dB coupled loss/channel
- ◆ Up to 25 dB Isolation, Low VSWR
- ◆ Low and High Wireless Bands
- ◆ 60W/input average Power Rating
- ◆ Convenient connector spacing
- ◆ RoHS compliant



| Model Number | Connector (female) | Frequency Range, MHz | Isolation dB | Input VSWR | *Coupling & Variation | Weight, nom. lbs. (kg) |
|--------------|--------------------|------------------------------|--------------|------------|------------------------------|------------------------|
| CM-81D | 7-16 mm | 700 - 2,200 2,200 - 2,700 | >25 dB | <1.20:1 | 5.0 ± 0.8 dB 5.3 ± 1.3 dB | 3.4 (1.6) |
| CM-81N | N conn | 700 - 2,200 2,200 - 2,700 | >23 dB | <1.20:1 | 5.0 ± 0.8 dB 5.3 ± 1.3 dB | 3.0 (1.4) |

*Coupling includes dissipative loss

A 3:3 Hybrid Combiner is a network of three hybrid couplers, which combines up to three inputs. In DAS applications, all three outputs may be used to feed different cables, essentially providing lossless combining. Any unused ports must be terminated in 50Ω at the appropriate power rating.

This network is an important building block in combining boxes used in neutral host in-building distributed antenna systems. See models in the KM series. (11/09)

Coupling, all paths: 4.8 dB nominal
Impedance: 50Ω nominal
Power Rating/input: 60W avg., 3kW pk.
Environment: -35° to +65°C, IP64 (IP67 to order)
PIM (Intermodulation): <-150 dBc (with +43 dBm x2 tones)
(using low PIM loads)
Finish: Housing: Passivated Aluminum
Connectors: Triplate

