

Modular Hybrid Combiners

The **MCC100-4x4** is a modular hybrid matrix and is offered in three frequency range options. *See Table below.*

In the event of CBRS and/or LAA deployments or requirements to be ready for these services, the extended range models can be utilized.

All Hybrid Modules can accept 500W per input port.

Modular Hybrids can be added to the **MCC100H** subrack for sector extensions or replaced for future frequency expansion

The **MCC100H** Hybrid Subrack is a 2RU enclosure that can accommodate up to (2) wideband 4x4 hybrid matrix combiners. All Antenna ports are in the front. Rear interfaces are for interconnection with the filter combiner module outputs.



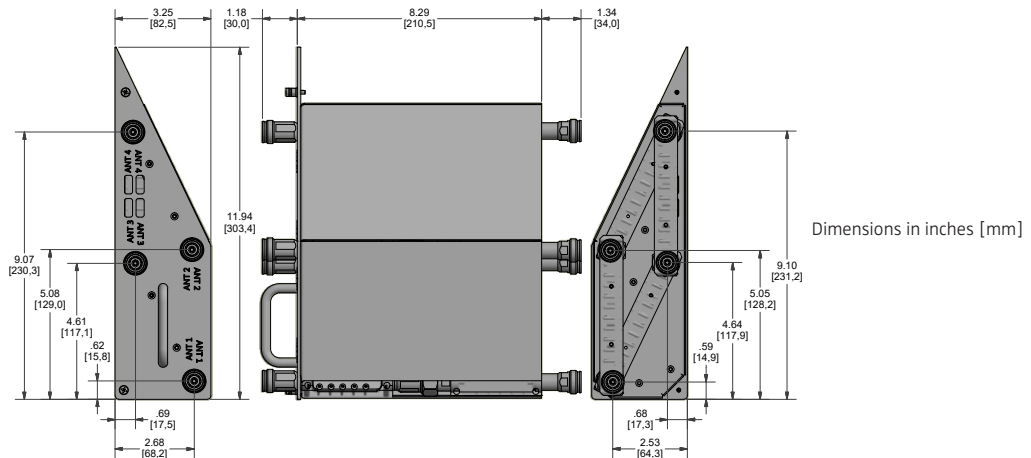
| Specification | MCC100-4x4A | | MCC100-4x4B* | | MCC100-4x4C* | |
|-----------------|---|----------------|------------------------|-----------------|---------------------------|-----------------|
| Card Type | Standard | | CBRS Expansion Support | | LTE-LAA Expansion Support | |
| Frequency Range | 617-2,700 MHz | | 617-3,700 MHz | | 617-5,925 MHz | |
| Coupling | 6.0 ± 1.8 dB | 617-800 MHz | 6.0 ± 1.8 dB | 617-800 MHz | 6.3 ± 1.0 dB | 617-1,500 MHz |
| | 6.2 ± 1.4 dB | 800-2,600 MHz | 6.2 ± 1.4 dB | 800-2,700 MHz | 6.5 ± 1.0 dB | 1,500-2,500 MHz |
| | 6.3 ± 1.8 dB | 2600-2,700 MHz | 6.3 ± 1.8 dB | 2,700-3,700 MHz | 6.6 ± 1.1 dB | 2,500-2,700 MHz |
| | | | | | 7.0 ± 1.3 dB | 2,700-4,900 MHz |
| | | | | | 7.2 ± 1.5 dB | 4,900-5,925 MHz |
| Isolation | >20 dB 23dB typ. | | >20 dB 23dB typ. | | >25 dB | 617-1,500 MHz |
| | | | | | >20 dB | 1,500-2,500 MHz |
| | | | | | >18 dB | 2,500-2,700 MHz |
| | | | | | >15 dB | 2,700-4,900 MHz |
| | | | | | >15 dB | 4,900-5,925 MHz |
| VSWR | 1.29:1 | | 1.29:1 | | 1.30:1 | 617-1,500 MHz |
| | | | | | 1.35:1 | 1,500-2,500 MHz |
| | | | | | 1.70:1 | 2,500-2,700 MHz |
| | | | | | 2.0:1 | 2,700-4,900 MHz |
| | | | | | 2.0:1 | 4,900-5,925 MHz |
| Impedance | 50Ω | | | | | |
| PIM | Intermodulation 2x43dBm tones | | | | <-155 dBc (-112 dBm) | |
| Group Delay | 2.5ns typ. | | | | | |
| Power/Input | 500W | | | | | |
| Weight, lb (kg) | 5.5 (2.5) | | | | | |
| Connector | 4.3-10 (f), long-neck | | | | | |
| Environment | -25°C to +55°C | | | | | |
| Ingress | Indoor, IP64 | | | | | |
| Dimensions | 300mm x 83mm x 210mm (excluding connectors) | | | | | |

- Each Hybrid Combining Card includes: three (3) TA-2MHE resistive terminations.
- See **MCC100-A02**, blank hybrid faceplate for **MCC100H** Subrack

* In Development

17DEC2018

MCC100-4x4 Outline



MCC100H - 19" Subrack for Hybrid Cards, 2RU



Outline Drawing for Rackmount

