250W 4:4 Hybrid Combiner, CM-86

4 x 4 Hybrid Matrix, Combiner & Splitter
694 - 2,700 MHz, 4.3-10, 7-16 or N
Rev. F

- Connects 4 inputs (same side) to 4 outputs (opposite side) for neutral hosting of DAS
- 18 dB Isolation, Low VSWR
- Wideband, Low Specified PIM
- 250W/input avg Power Rating
- AISG DC Feed Through/By Pass
- RoHS Compliant

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. Unused ports must be terminated externally in 50Ω. To minimize adding passive intermodulation (PIM) all such output terminations must be low PIM, such as the TK-27MN.

Mechanically, all inputs are on one side of the box and the outputs on the opposite face, for simple connection into the DAS distribution system.

<table>
<thead>
<tr>
<th>Model Number/Connector</th>
<th>Frequency Range, MHz incl. Insertion Loss, dB VSWR</th>
<th>Input &amp; Output Isolation, dB</th>
<th>Input Power Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>CM-86N</td>
<td>694 - 2,700</td>
<td>6.2 ± 1.3</td>
<td>&gt;18</td>
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<tr>
<td>CM-86D</td>
<td></td>
<td></td>
<td>&lt;1.30:1</td>
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<tr>
<td>CM-86E</td>
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</tbody>
</table>

Power Rating: 250 W, Avg. CW 1.5 kW Peak
Impedance: 50Ω nominal
Temperature: -35°C to +65°C
Environment: IP65
PIM, Intermod: -161 dBc (with 2 x +43dBm tones)
Finish:
Enclosure: Anodized aluminum
Connectors: Triplate
Weight, nom: 7.4 lb; 3.4 kg

Note: Specifications are subject to change without prior notification.

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