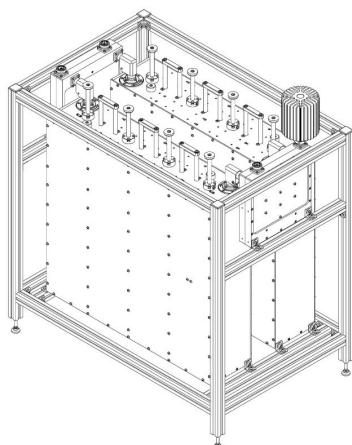


# FM 4-Pole 160 mm Balanced Combiner

## DM4E160RF



### FEATURES

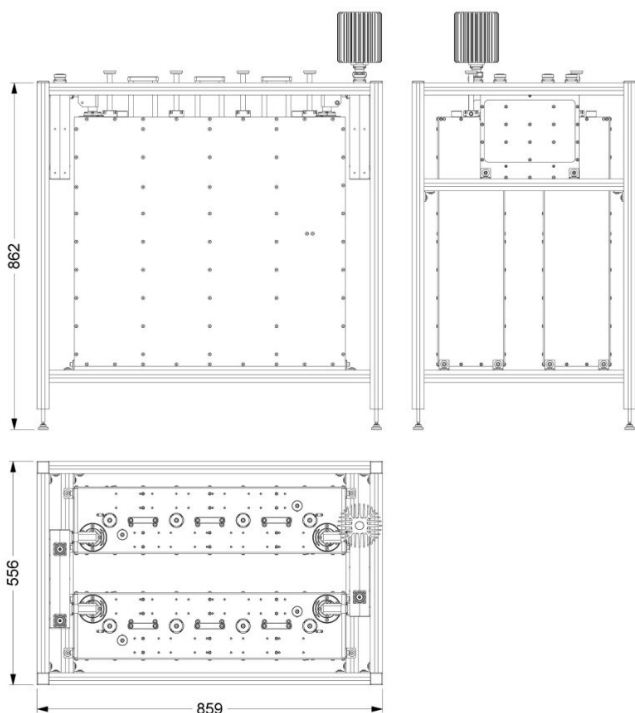
- EVA-Mode
- 0.4 MHz Minimum Channel Spacing
- Full-Band Tunability
- DC-Short
- Modular Connector System
- Modular Frame System
- 10-Year Warranty

### OPTIONS

- Heat Sinks

### SPECIFICATIONS

|                                    |   |
|------------------------------------|---|
| Code / Revision                    | B-DM4E160RF/n / B   |
|                                    | <i>n: Number of Filtered Inputs</i>   |
| No. of Poles / Cavity Size         | 4-Pole / 160 mm   |
| Frequency Range                    | 87.5-108 MHz  |
| Frequency Spacing                  | ≥ 0.4 MHz   |
| Temperature Stability              | < 800 Hz/K  |
| Max Operating Temperature (Body)   | 65°C (149°F)  |
| Environmental Conditions           | -5 to +55°C (+23 to +131°F), IP60   |
| Dimensions / Weight <sup>(1)</sup> | 859x556x862 mm / 77 kg  |
| Links                              | 1+5/8" Rigid Line   |
| Connectors <sup>(2)</sup>          | <b>3x 32 mm NB Input; WB Input; Output</b><br>D-PC32C N Female<br>D-PC32E 7-16 Female (Default)<br>D-PC32G 7/8" FastLine Socket<br>D-PC32H 7/8" FastLine Flange<br>D-PC32J 1+5/8" FastLine Socket<br>D-PC32K 1+5/8" FastLine Flange |
| Options <sup>(2)</sup>             | O-HCS.07 Heat Sinks   |



### TUNING DATA <sup>(2)</sup>

|                                       | 1.2                   |                                 | 1.0                   |                                 | 0.8                   |                                 |
|---------------------------------------|-----------------------|---------------------------------|-----------------------|---------------------------------|-----------------------|---------------------------------|
| Frequency Spacing (Bandwidth)         | 0.8 MHz (1.2 MHz)     |                                 | 0.6 MHz (1.0 MHz)     |                                 | 0.4 MHz (0.8 MHz)     |                                 |
| Tuning Code                           | T-4F.01               |                                 | T-4F.02               |                                 | T-4F.03               |                                 |
| Max RMS NB Input Power <sup>(3)</sup> | Default               | (108 MHz) 1.6 kW                | Default               | (108 MHz) 1.2 kW                | Default               | (108 MHz) 900 W                 |
|                                       | Heat Sinks            | 1.9 kW                          | Heat Sinks            | 1.5 kW                          | Heat Sinks            | 1.1 kW                          |
| Max RMS Output Power <sup>(3)</sup>   | 5.9 kW                |                                 | 5.9 kW                |                                 | 5.9 kW                |                                 |
| NB Insertion Loss                     | (87.5 MHz)            | (108 MHz)                       | (87.5 MHz)            | (108 MHz)                       | (87.5 MHz)            | (108 MHz)                       |
|                                       | C.F.                  | < 0.46 dB < 0.47 dB             | C.F.                  | < 0.59 dB < 0.60 dB             | C.F.                  | < 0.84 dB < 0.86 dB             |
|                                       | ±150 kHz              | < 0.59 dB < 0.60 dB + 0.06·n dB | ±150 kHz              | < 0.84 dB < 0.86 dB + 0.06·n dB | ±150 kHz              | < 2.29 dB < 2.33 dB + 0.06·n dB |
| WB Insertion Loss                     | < 0.06·n dB           |                                 | < 0.06·n dB           |                                 | < 0.06·n dB           |                                 |
| Selectivity                           | C.F. ± 1.2 MHz        | > 27 dB                         | C.F. ± 1.0 MHz        | > 27 dB                         | C.F. ± 0.8 MHz        | > 27 dB                         |
| Harmonic Attenuation                  | > 40 dB up to 324 MHz |                                 | > 40 dB up to 324 MHz |                                 | > 40 dB up to 324 MHz |                                 |
| NB Return Loss (VSWR)                 | > 26 dB (1.11)        |                                 | > 26 dB (1.11)        |                                 | > 26 dB (1.11)        |                                 |
| WB Return Loss (VSWR)                 | Single Ch.            | > 30 dB (1.07)                  | Single Ch.            | > 30 dB (1.07)                  | Single Ch.            | > 30 dB (1.07)                  |
|                                       | All band              | > 24 dB (1.14)                  | All band              | > 24 dB (1.14)                  | All band              | > 24 dB (1.14)                  |
| Isolation Between Inputs              | > 35 dB               |                                 | > 35 dB               |                                 | > 35 dB               |                                 |
| Group Delay Variation                 | < 10 ns               |                                 | < 20 ns               |                                 | < 40 ns               |                                 |

<sup>(1)</sup> Approximate, default configuration <sup>(2)</sup> Other Connectors, Options, Tunings available <sup>(3)</sup> Altitude < 1500 m (4,900 ft.), Free air, Ambient temp. < 30 °C (86 °F)