

HY0248 3.0 dB FM Hybrid Splitter/Combiners

3 dB, FM Band 88 MHz to 108 MHz



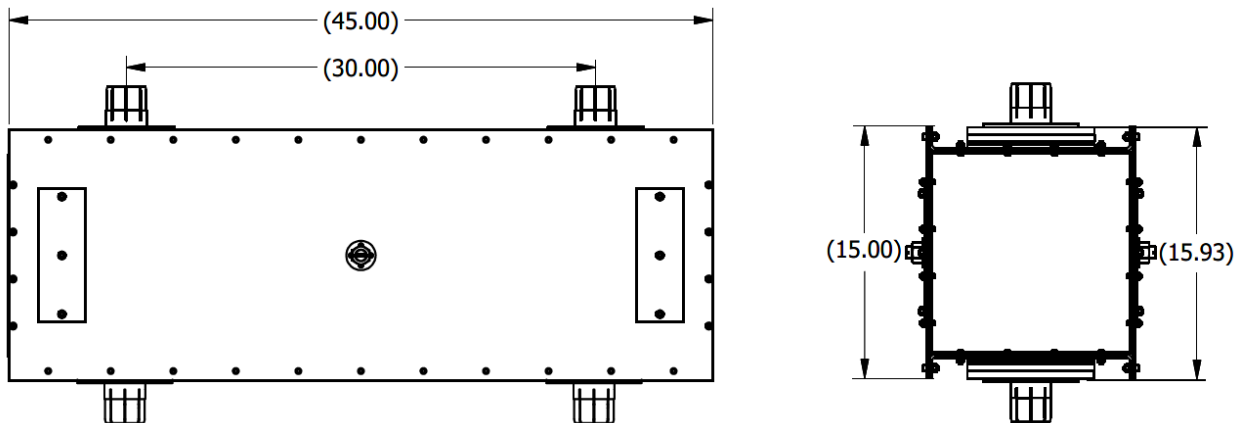
The HY0248 is a 3-dB, 90-degree Hybrid Coupler provided as an output hybrid for high-power constant impedance FM bandpass filter/combiner modules. The hybrid can also be used as a power divider. It is a "cross-over" design, so the inputs, when used as a combiner, are on one side of the hybrid, and the wideband

input and output are on the opposite. The input port opposite the combined output lags the opposite input by 90 degrees. The hybrid is available with any combination or 3-1/8-inch, 4-1/16-inch, 6-1/8-inch, or 9-3/16-inch Marman or flanged, fixed male ports. They are constructed of lightweight aluminum and can be supplied at coupling ratios other than 3.0 dB. Power handling is dependent on flange selection. Models can handle up to 150 kW (2 x 75 kW) at the output when used as a combiner. Hybrids with coupling ratios other than 3 dB are available by special order.

HY0248 FM Hybrid Splitter/Combiner Specifications:

Power Handling:	150 kW at the output when used as a combiner
Frequency Range:	88 to 108 MHz
Input VSWR:	1.06 : 1 or better
Insertion Loss:	3.01 dB +/- 0.15 dB
Isolation:	30 dB min.
Phase Split:	90 +/- 2 degrees
Peak Power Rating:	1500 kW total capacity
Weight:	76 lbm (34.5 kg)
Connections:	Any combination of the following: 3-1/8-inch EIA Flanged, Unflanged, or Marman 4-1/16-inch Flanged, Unflanged, or Marman 6-1/8-inch (50 ohm) EIA Flanged or Marman 9-3/16-inch (50 ohm) EIA Flanged

Dimensions: See drawing below



HY0248 3 dB FM Hybrid. The dimensions shown are inches.