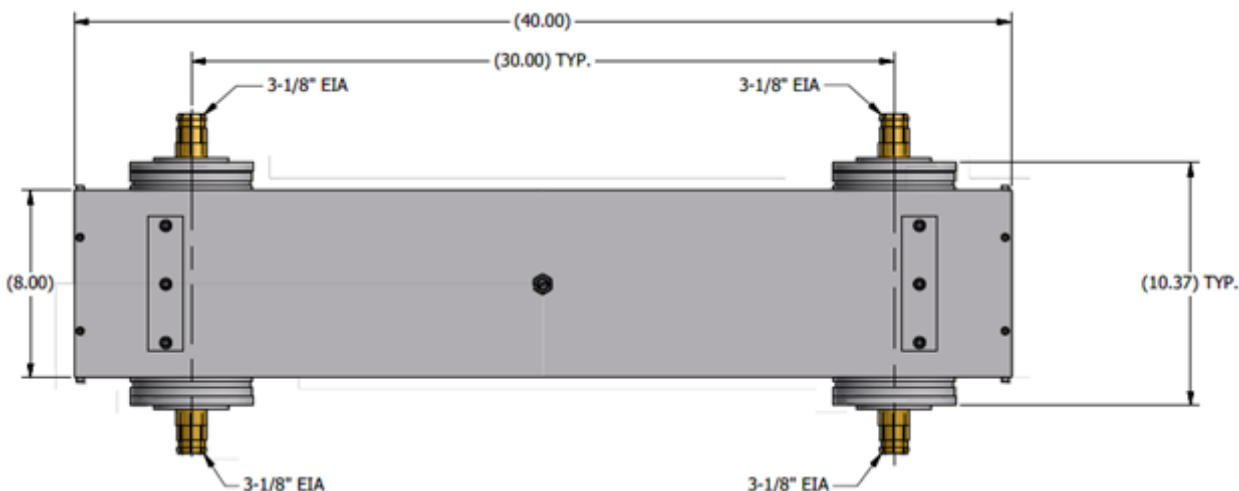


HY0241 Series 3.0 dB FM Hybrid Splitter/Combiners

3 dB, FM Band 88 MHz to 108 MHz

The HY0241 is a 3-dB, 90-degree Hybrid Coupler for combining the power of two FM transmitters. The hybrid can also be used as a power divider. All standard models are "cross-over" designs, so when used as a combiner, the inputs are on one side of the hybrid, and the load port and combined output are on the opposite side. The input port opposite the combined output lags the other input by 90 degrees. The hybrid is available with any combination of 1-5/8-inch, 3-1/8-inch, 4-1/16-inch, and 6-1/8-inch flanged male ports. They are constructed of lightweight aluminum and can be designed to have coupling ratios other than 3.0 dB. Power handling is dependent on flange selection. Models are available to handle up to 120 kW at the combined output (2 x 60 kW).



HY0241A 3 dB FM Hybrid. The dimensions shown are inches.

HY0241 FM 3.0 dB Cross-Over Hybrid Specifications

Part No	Weight:		Analog or Digital FM		Hybrid Analog FM + HD Radi	
			Each Input*	Combined Output*	Each Input	Combined Output*
HY0241A	55-pounds	(24.8-kg)	19.0-kW	38.0-kW	17.1 kW + 1.9 kW	34.2 kW + 3.8 kW
HY0241B	58-pounds	(26.3-kg)	35.0-kW	70.0-kW	32.0 kW + 3.0 kW	64.0 kW + 6.0 kW
HY0241C	68-pounds	(30.8-kg)	60.0-kW	120.0-kW	55.0 kW + 5.5 kW	110.0 kW + 11.0 kW
HY0241D	57-pounds	(25.8-kg)	35.0-kW	70.0-kW	32.0 kW + 3.0 kW	64.0 kW + 6.0 kW
HY0241E	56-pounds	(25.4-kg)	35.0-kW	70.0-kW	32.0 kW + 3.0 kW	64.0 kW + 6.0 kW
HY0241F	55-pounds	(24.9-kg)	35.0-kW	70.0-kW	32.0 kW + 3.0 kW	64.0 kW + 6.0 kW
HY0241G	57-pounds	(26.0-kg)	38.0-kW	76.0-kW	34.2 kW + 3.8 kW	68.4 kW + 7.6 kW
HY0241H	59-pounds	(27.0-kg)	60.0-kW	120.0-kW	55.0 kW + 5.5 kW	110.0 kW + 11.0 kW
HY0241T	70-pounds	(31.8-kg)	7.5-kW	15.0-kW	6.8 kW + 0.7 kW	13.5 kW + 1.4 kW
HY0241U	62-pounds	(28.1-kg)	15.0-kW	30.0-kW	13.5 kW + 1.4 kW	27.0 kW + 2.7 kW
HY0241V	66-pounds	(29.9-kg)	15.0-kW	30.0-kW	27.0 kW + 2.7 kW	27.0 kW + 2.7 kW

Power Ratings shown are average power at 108 MHz for hybrid used as a combiner.

* Power rating for hybrid outputs when used as a power divider.

** Power rating for hybrid input when used as a power divider.

Maximum voltage rating 5 kV RMS

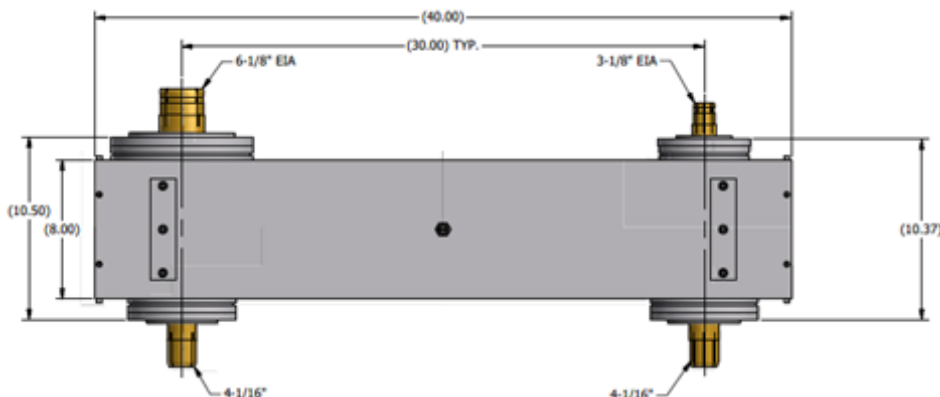
HY0241Series 3.0 dB FM Hybrid Splitter/Combiners

3 dB, FM Band 88 MHz to 108 MHz

HY0241 FM 3.0 dB Cross-Over Hybrid Specifications									
Part No.	Port 1		Port 2		Port 3		Port 4		Split
	Size	Type	Size	Type	Size	Type	Size	Type	
HY0241A	3-1/8-inch	EIA (m)	3-1/8-inch	EIA (m)	3-1/8-inch	EIA (m)	3-1/8-inch	EIA (m)	3
HY0241B	4-1/16-inch	FL (m)	4-1/16-inch	FL (m)	4-1/16-inch	FL (m)	4-1/16-inch	FL (m)	3
HY0241C	6-1/8-inch	EIA (m)	6-1/8-inch	EIA (m)	6-1/8-inch	EIA (m)	6-1/8-inch	EIA (m)	3
HY0241D	3-1/8-inch	EIA (m)	4-1/16-inch	FL (m)	4-1/16-inch	FL (m)	4-1/16-inch	FL (m)	3
HY0241E	3-1/8-inch	EIA (m)	3-1/8-inch	EIA (m)	4-1/16-inch	FL (m)	4-1/16-inch	FL (m)	3
HY0241F	3-1/8-inch	EIA (m)	3-1/8-inch	EIA (m)	3-1/8-inch	EIA (m)	4-1/16-inch	FL (m)	3
HY0241G	3-1/8-inch	EIA (m)	3-1/8-inch	EIA (m)	3-1/8-inch	EIA (m)	6-1/8-inch	EIA (m)	3
HY0241O	3-1/8-inch	EIA (m)	4-1/16-inch	FL (m)	4-1/16-inch	FL (m)	6-1/8-inch	EIA (m)	3
HY0241T	1-5/8-inch	EIA (m)	1-5/8-inch	EIA (m)	1-5/8-inch	EIA (m)	1-5/8-inch	EIA (m)	3
HY0241U	1-5/8-inch	EIA (m)	1-5/8-inch	EIA (m)	3-1/8-inch	EIA (m)	3-1/8-inch	EIA (m)	3
HY0241V	1-5/8-inch	EIA (m)	1-5/8-inch	EIA (m)	1-5/8-inch	EIA (m)	3-1/8-inch	EIA (m)	3

HY0241 FM 3.0 dB Cross-Over Hybrid Specifications

Frequency Range:		88 MHz to 108 MHz	
Input VSWR:		1.06 : 1 or better over channel	
Coupling:		3.01 dB +/- 0.1 dB over channel	
Isolation:		30 dB min.	
Geometry:		"Cross-over" configuration	
Connector Centerline Spacing:		30.00-inches	(762-mm)
Dimensions:	Length	40.00-inches	(1016-mm)
	Width	8.00-inches	(203-mm)
Flange to Flange Height			
1-5/8-inch to 1-5/8-inch		11.34-inches	(288-mm)
1-5/8-inch to 3-1/8-inch		10.85-inches	(276-mm)
3-1/8-inch to 3-1/8-inch		10.37-inches	(263-mm)
3-1/8-inch to 4-1/16-inch		10.37-inches	(263-mm)
4-1/16-inch to 4-1/16-inch		10.37-inches	(263-mm)
3-1/8-inch to 6-1/8-inch		10.50-inches	(267-mm)
4-1/16-inch to 6-1/8-inch		10.50-inches	(267-mm)
6-1/8-inch to 6-1/8-inch		10.62-inches	(270-mm)



HY0241O 3 dB FM Hybrid. The dimensions shown are inches.