

CY316 3-way Gysel Power Combiner

Any specified UHF RF Channel (470 to 700 MHz)

3 x 8 kW average power ATSC

The Model CY316 In-Phase Power Combiner consists of a coaxial 3-way Gysel assembly and three, 50-ohm, forced air-cooled oil filled reject loads. A non-directional voltage probe is included at each of the load ports; each is labeled with the measured coupling value at the specified RF Channel. The Power Combiner assembly resides on an aluminum base frame, suitable for floor-mounting. The input and output connections are vertical. The three input connections are 3-1/8-inch, 50-ohm EIA flanged. The combined output is a 4-1/16-inch, 50-ohm flanged, male, connection.

In-Phase Gysel Combiner, includes:

- (1) 3-way Coaxial Gysel
- (3) 5 kW, Forced Air-Cooled Reject Loads
- (3) Non-Directional Voltage Probe, 1-5/8-inch
- (1) Interconnect components between above items
- (1) Aluminum Floor-mount base frame

Inputs: 3-1/8-inch, 50-ohm EIA flange, male, vertical

Output: 4-1/16-inch, 50-ohm flange, male, vertical

Voltage Probe: Type "N" female

Output Power Rating:	24 kW average, maximum
Channel of Operation:	Any single specified UHF channel (470 to 700 MHz)
Input VSWR: 1.06 :	1 or better over channel
Amplitude Imbalance:	0.4 dB max over channel (between any 2 inputs, fed from output)
Phase Imbalance:	5 deg. max over channel (between any 2 inputs, fed from output)
Isolation:	30 dB min. over channel
Insertion Loss:	0.15 dB max. (over channel)
Voltage Probe Coupling:	-46 dB +/- 0.5 dB (at channel center-frequency)
Approximate Dimensions:	See layout below (Dimension shown are inches)

