

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 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

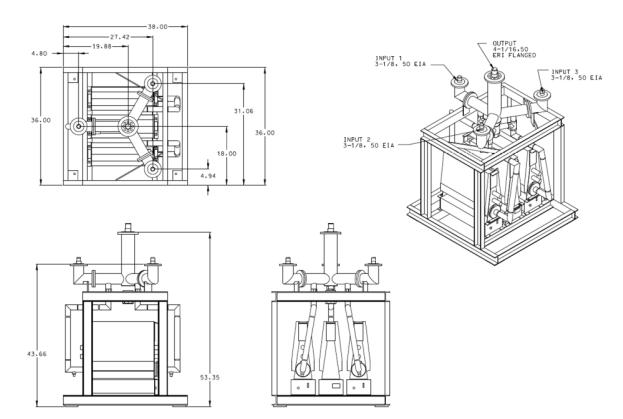
Channel of Operation: Any single specified UHF channel (470 to 700 MHz)

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)



Electronics Research, Inc. • 7777 Gardner Road • Chandler, IN 47610-9219 • USA $\mid +1$ 812 925-6000 (tel) • +1 812 925-4030 (fax)