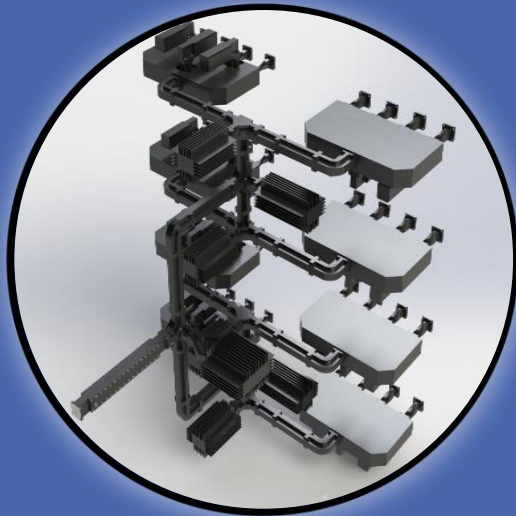


WR90 32-Way Combining System Assembly



Description

The WR90 Power Combining System Assembly stands as an advanced RF solution capable of efficiently combining 32-input signals. This intricate system comprises eight racks, each housing three Magic Tees responsible for controlling the phase and amplitude of the incoming signals, ensuring seamless and interference-free merging. An additional seven Magic Tees handle the output signals, further enhancing signal integrity. To bolster system reliability, high-power terminations are critically positioned at the loaded ports, providing crucial protection against input failures. Adding to its versatility, the dual broad-wall coupler embedded within the assembly can sample signals in both directions, enabling precise adjustments tailored to diverse applications. Beyond its exceptional combining efficiency and robust power handling capabilities, the assembly offers a high matching level and minimal insertion loss, rendering it an ideal choice for various applications, including **power amplifying structures, radar systems, and antenna feeding networks**, where signal quality, precision, and efficiency are critical for peak performance.

Electrical Specifications

Frequency	: 8.20 – 12.40 GHz
VSWR – Input	: 1.50: 1
VSWR - Output	: 1.60: 1
Insertion Loss	: 1.0 dB
Isolation - Far	: 40.0 dB
Nominal Coupling – Forward	: 50.0 dB \pm 1.5 dB
Nominal Coupling – Reverse	: 50.0 dB \pm 1.5 dB
Directivity	: > 18.0 dB
Power Handling – Average	: 5.0 kW CW

Mechanical Specifications

Waveguide Size	: WR 90
Interface – Input Ports	: UG-135/U Square Cover
Interface – Output Port	: UG-135/U Square Cover
Material	: Aluminum 6061
Finish	: Silver
Paint	: Black

Contact Info :

Address:
5790 rue Donahue,
St-Laurent, QC
Canada, H4S 1C1

Phone:
(+1) 514-664-5790

Website:
www.smcq.com

email:
info@smcq.com



WR90 32-Way Combining System Assembly Typical Measured Results

