



## MC216A-2 RF MULTI-COUPLER

### Features

- ❖ 200-5250 MHz (6 selectable bands)
- ❖ 2 Input Ports and 16 Output Ports
- ❖ >70 dB isolation between ports
- ❖ +/-5 dB Programmable Gain per Output
- ❖ <7 dB Noise Figure
- ❖ +/- 1 dB linearity
- ❖ 0 dBm Compression Point (P1)
- ❖ Local and Remote Control
- ❖ Incoming Spectrum Monitoring Ports
- ❖ Programmable Input Port Switching and Output Port Assignment Option



Software Remote Control

### Description

The MC216A-2 RF Multi-Coupler provides the frequency range and versatility for managing the RF input signals of any telemetry ground station. Setup and programming is accomplished both locally (front panel) and remotely via Ethernet. Signal integrity is maintained through excellent port isolation (>70 dB) as well as overall noise figure. The user can add or subtract signal gain as required to balance RF output signal levels and mitigate system insertion loss in each selected frequency band.

The 2U rack-mount MC216A-2 has 2 RF input ports, 16 RF output ports and 2 RF Spectrum Monitoring ports. In addition, an optional feature provides the ability to program either Input 1 or Input 2 to all 16 outputs.

The MC216A-2 provides excellent linearity across each selected frequency band, as well as an upper limit P1 Compression Point of 0 dBm. This level of input power without compression, as well as the 200 MHz to 5250 MHz frequency range, programmable channel gain controls and linearity across each frequency band provides for overall multi-coupler performance that is unique in the telemetry industry.

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# MC216A-2 Specifications

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## Electrical Performance

Input Ports	2 (“N” connectors)
Output Ports	16 “N” connector outputs; 2 “SMA” Spectrum Monitoring Ports
Input-to-Output Port Switching Option	This option provides the ability to program either Input 1 or Input 2 to all 16 outputs
Frequency Range	200 MHz to 5250 MHz + 6 selectable bands for optimum +/- 1 dB linearity 200-500 MHz (P Band) 300-1150 MHz (CIF Band) 1415 to 1585 MHz (L1 Band) 1650 to 1850 MHz (L2 Band) 2185 to 2485 MHz (E-Band) 4400 to 5250 MHz (C-Band)
VSWR	<1.5:1
Noise Figure	<7 dB
Gain Controls	+/-5 dB per output channel in 0.2 dB steps
Linearity	+/- 1 dB across each selected channel
P1 Compression Point	Begins compressing at 0 dBm input power
Isolation	>70 dB between RF output ports

## Communications

Local Control	Front Panel
Remote Control	Ethernet (RJ45) and SEMCO Network SW

## Power Requirements

Input Power	90 to 265 VAC; 50-60 Hz; Auto Ranging
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## Physical and Environmental

Size and Weight	2U RM; 17”W x 3.5”H x 20”D; <20 pounds
Operating Temperature	0 to +50 degrees C
Storage Temperature	-20 to +70 degrees C
Humidity	Up to 95% non-condensing
Altitude	Up to 30,000 feet
EMI	Designed to meet MIL-STD 461

Specifications Subject to Change Without Notice

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