



INSTRUCTION MANUAL

RADIO FREQUENCY

COUPLER

MODEL RFC-SUS

INSTRUCTION MANUAL

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RADIO FREQUENCY COUPLER

ELECTRO-METRICS

MODEL RFC-SUS

SERIAL NO: N/A

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WARRANTY

This Model RFC-SUS Radio Frequency Coupler is warranted for a period of 12 months (USA only) from date of shipment against defective materials and workmanship. This warranty is limited to the repair of or replacement of defective parts and is void if unauthorized repair or modification is attempted. Repairs for damage due to misuse or abnormal operating conditions will be performed at the factory and will be billed at our commercial hourly rates. Our estimate will be provided before the work is started.

DESCRIPTION AND USE ELECTRO-METRICS RFC-SUS RADIO FREQUENCY COUPLER

1.0 Description

The Radio Frequency Coupler Model RFC-SUS is designed for Conducted Susceptibility Testing to Method CS02 of MIL-STD-461/462.

The RFC-SUS is designed to inject a 50 kHz to 400 MHz signal onto the Equipment Under Test (EUT) power lines. The input signal is applied via a BNC connector at one end of the coupler, with the connection to the EUT power lines via 5-way binding posts at the the other.

A monitor port (BNC connector) is also provided to allow the signal voltage and waveform to be safety monitored. An attenuation factor of 20 dB from the input port to the monitor port provides protection to the monitoring device (e.g. oscilloscope) and a conversion factor of X10. (i.e. the signal voltage at the monitor port is 10 times less than that being injected onto the EUT power lines.) The monitor port impedance is 50 ohms; thus to obtain accurate amplitude readings, the input impedance of the monitoring device must be 50 ohms or terminated in 50 ohms.

2.0 Specifications

2.1 Electrical

Frequency Range:	50 kHz-400 MHz.
Rating (Output Port):	270 VAC (maximum).
Attenuation: (Input Port to Monitor Port)	20 dB \pm 1.5 dB.
Monitor Port Impedance:	50 ohms.
Connectors: Input/Monitor Ports:	BNC:
Output Port:	5-WAY BINDING POSTS.

2.2 Mechanical

Length:	124 mm (4.8")
Height:	49 mm (1.9")
Width:	73 mm (2.9)
Weight:	230 g (0.5 lbs)