

## **INSTRUCTION MANUAL**

# TRANSIENT LIMITER

**MODEL TRL-30** 

9 kHz - 100 MHz

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### TRANSIENT LIMITER

**ELECTRO-METRICS** 

**MODEL TRL-30** 

9 kHz-100 MHz

**SERIAL NO: N/A** 

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## WARRANTY

This Model TRL-30 Transient Limter 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.

## TRL-30 TRANSIENT LIMITER OPERATING MANUAL

#### 1.0 Description

The TRL-30 Transient Limiter is designed to prevent damage to the sensitive RF Input circuitry of spectrum analyzers from power line transients encountered when using a LISN for conducted EMI measurements.

The TRL-30 has a high pass filter to attenuate the power line frequency and its associated harmonics plus a constant 10 dB loss from 9 kHz to 100 MHz. The TRL-30 can handle 2.5 Watts average power (maximum) or 10 kW (maximum) for 10 µs transient surges.

### 2.0 Specifications

#### 2.1 Electrical

Frequency Range: 9 kHz-100 MHz.

Attenuation:  $10 \text{ dB} \pm 0.5 \text{ dB}.$ 

Impedance: 50\_ nominal.

VSWR: 1.5:1 maximum.

Rejection: 90 dB minimum @ 60 Hz.

80 dB minimum @ 120 Hz. 40 dB typical @ 1 kHz.

Input Power: 2.5 Watts average, maximum.

10 kW for 10 µs transient surges.

Input/Output Connectors: BNC.

#### 2.2 Mechanical

Length: 121 mm (4.75")

Width: 32 mm (1.25")

Height: 38 mm (1.50")

Weight: 228 g (8 ounces)