



**“Results You Can Count On”**

**4901-D1-Micro  
Differential Mode Noise Injector  
With Micro Interruption Function**



- Interfaces Between Model 4901 Noise Generator and Model 458 Loop Simulator
- Converts 50-ohm (Unbalanced) Output of Noise Generator to 4K-ohm High Impedance (Balanced)
- Wide Bandwidth (20 kHz to 30 MHz)
- Dynamic Range of Differential Mode Noise Injection is 95 dB (-90 dBm to +5 dBm)
- Programmable Micro Interruptions in 1-msec Increments
- Noise Floor Below -145 dBm/Hz when used in conjunction with Model 4901

Noise Injector Specifications	
<b>Bandwidth</b>	20 kHz to 30 MHz
<b>Output Impedance</b>	4kΩ Minimum (20 kHz to 30 MHz)
<b>Input Impedance</b>	50Ω unbalanced (100Ω unbalanced)
<b>Output Mode</b>	Differential, balanced
<b>Noise Floor</b>	Below -145 dBm/Hz as measured at the output of the noise injector
<b>Insertion Loss</b>	13.0/35 dB ± 0.5 dB
<b>Connectors</b>	SMB Female Connector for 4901 Multi-Output Noise Simulator, RJ45 (2) Female Connectors for Loop Simulator (external cable provided) and for the modem.
<b>Operating Temperature Range</b>	0 to 50 °C
<b>Operating Relative Humidity</b>	Maximum 80% for up to 31° C, decreasing linearly to 50% at 40°C
<b>Mechanical Dimensions</b>	2.6" W x 1.4" H x 4.7" D
<b>Power supply</b>	AC 90 V to 264 V, 47 to 63 Hz, 10 W (supports 1-4 Noise Injectors)

100Ω input used when the output from one port is split to two noise injectors. 100Ω and 50Ω are used when the output from two ports are combined in one noise injector.

Micro-Interruptions Specifications	
<b>Micro Interruption Switches</b>	Inclusion at either ATU-R/VTU-R or ATU-O/VTU-O ends
<b>Duration</b>	Programmable
<b>Minimum Duration</b>	1 msec
<b>Duration Increments</b>	1 msec
<b>Duration Accuracy</b>	+/- 0.5 msec
<b>Periodicity</b>	Programmable in increments of multiples of the Duration

Specifications are subject to change without notice. Made in USA.