



**“Results You Can Count On”**

**4901-D1  
Differential Mode Noise Injector**



- 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)
- 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>	4k $\Omega$ Minimum (20 kHz to 30 MHz)
<b>Input Impedance</b>	50 $\Omega$ unbalanced (100 $\Omega$ 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 $\pm$ 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 $^{\circ}$ C
<b>Operating Relative Humidity</b>	Maximum 80% for up to 31 $^{\circ}$ C, decreasing linearly to 50% at 40 $^{\circ}$ 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)

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

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