

A4001 ESD Current Target Calibration Kit



1. Description

Model A4001 ESD Current Target Calibration Kit is a wide-band ESD Target for ESD simulator calibration. The 2 Ohm impedance A4001 ESD target complies with the latest standards IEC 61000-4-2 and ISO 10605. The 1 Ohm impedance A4001-N1R ESD target complies with the standard MIL-STD-331D. The wide-band attenuator provides return loss while the cable is used as the connection to the oscilloscope. The frequency response specifications are taken with the complete assembly.

A4001 ESD Current Target Calibration Kit is comparable to the following models: Haefely PET 4000, Teseq MD 103, Noiseken 06-00067A, and EM Test CTR2.

2. Features

- Wideband up to 4 GHz
- A4001: 2 V/A transfer impedance, $\pm 1\%$ (with a 20 dB attenuator, 0.2 V/A)
- A4001-N1R: 1 V/A transfer impedance, $\pm 5\%$ (with a 20 dB attenuator, 0.1 V/A)
- Gold plated surface finish
- Excellent voltage linearity up to 30 kV

3. Applications

- Calibration kit for ESD simulators
- General wideband ESD current waveform measurement

4. Specifications

	A4001	A4001-N1R
Frequency response	DC – 4 GHz ($S_{21} < \pm 0.5$ dB up to 1GHz, $< \pm 1.2$ dB up to 4 GHz)	DC – 4 GHz ($S_{21} < \pm 0.5$ dB up to 1GHz, $< \pm 1$ dB up to 4 GHz)
Input resistance	2.08 Ohm ($\pm 1\%$) (2.00 Ohm when match with 50 Ohm load)	1 Ohm ($\pm 5\%$)
Max. IEC Pulse Amplitude	Verified up to ± 30 kV	Up to ± 25 kV
Transfer Impedance	0.2 V/A with 20 dB attenuator	0.1 V/A with 20 dB attenuator
Dimensions	D70 x H30 mm	
Weight	0.5 kg	

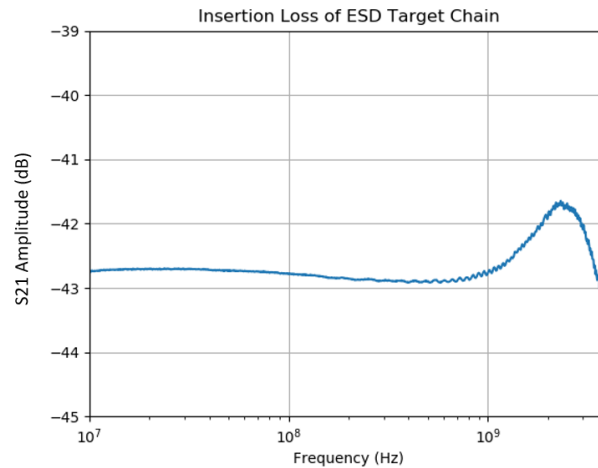


Figure 1 A4001 Typical Target-Attenuator-Cable Chain S_{21} Measurement (with 20 dB Attenuator)

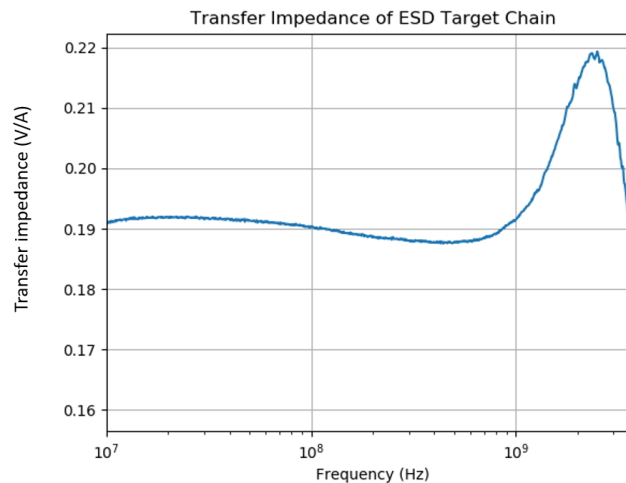


Figure 2 A4001 Typical Target-Attenuator-Cable Chain Transfer Impedance (with 20 dB Attenuator)

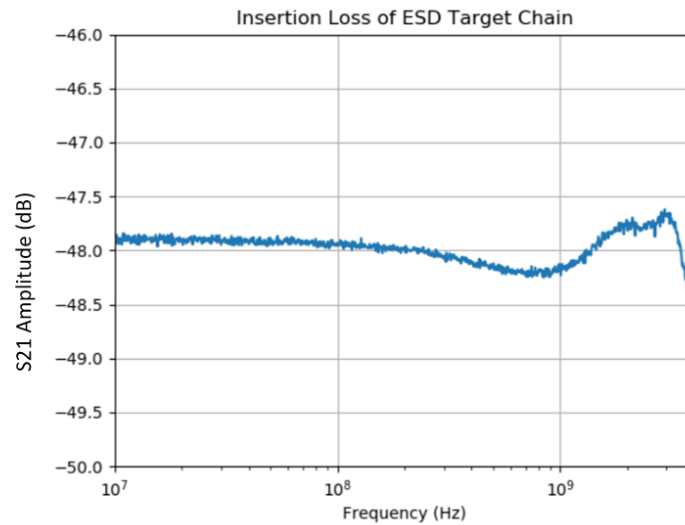


Figure 3 A400-N1R Typical Target-Attenuator-Cable Chain S21 Measurement (with 20 dB Attenuator)

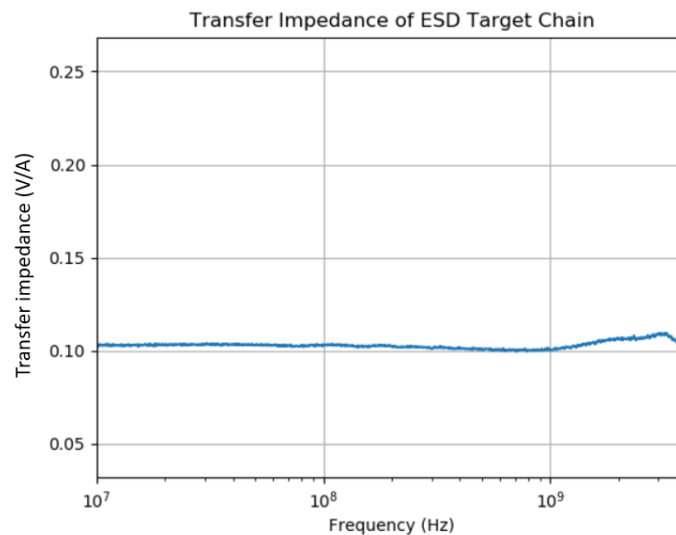


Figure 4 A4001-N1R Typical Target-Attenuator-Cable Chain Transfer Impedance (with 20 dB Attenuator)

5. Ordering Information

Part Number	Description	Lead Time
A4001-kit-N-20	2 Ohm ESD Current Target with 20 dB N type attenuator and cable with factory calibration report	1-3 weeks
A4001-kit-N-30	2 Ohm ESD Current Target with 30 dB N type attenuator and cable with factory calibration report	1-3 weeks
A4001-Kit-N1R-20	1 Ohm ESD Target with 20 dB N type attenuator and cable per MIL-STD-331D	1-3 weeks

A4001-TP	ESD Target Plane	2-4 weeks
A4001-TSC	ESD Target Plane, Oscilloscope Shielding Cabinet, Power Line Filter	2-4 weeks