

## 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 in accordance with the latest standards IEC 61000-4-2 and ISO 10605. 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 4GHz
- 0.5A/V transfer impedance,  $\pm 1\%$  (with a 20dB attenuator, 5A/V)
- Gold plated surface finish
- Excellent voltage linearity up to 30kV

### 3. Applications

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

## 4. Specifications

<b>Frequency response</b>	DC – 4GHz ( S21 <math>\pm 0.5\text{ dB}</math> up to 1GHz, <math>\pm 1.2\text{ dB}</math> up to 4GHz )
<b>Input resistance</b>	2.08 Ohm ( $\pm 1\%$ ) (2.00 Ohm when match with 50 Ohm load)
<b>Max. IEC Pulse Amplitude</b>	Verified up to $\pm 30\text{ kV}$
<b>Voltage Non-linearity</b>	<math>< 2\%</math> up to 20kV, <math>< 5\%</math> up to $\pm 30\text{ kV}$
<b>Dimensions</b>	D70 x H30 mm
<b>Weight</b>	0.5kg
<b>Warranty</b>	1 year (Extendable)

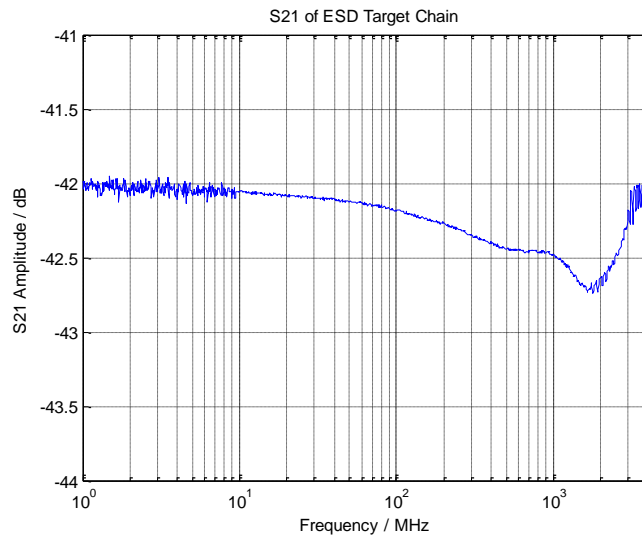


Figure 1 Target-Attenuator-Cable Chain S21 Measurement (with 20 dB Attenuator)

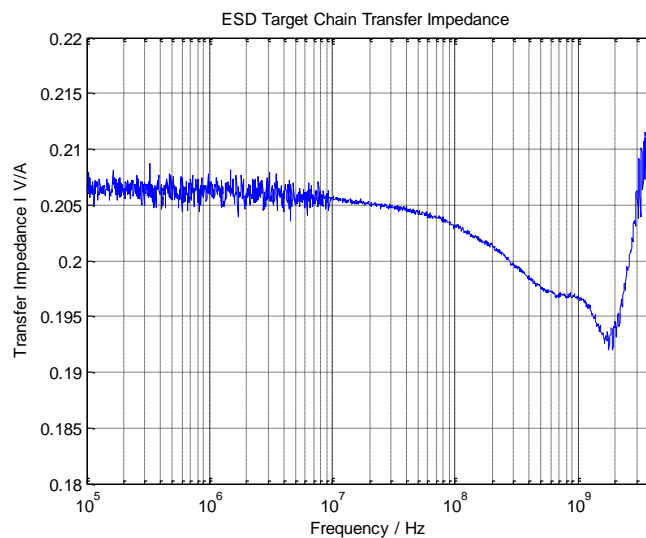


Figure 2 Target-Attenuator-Cable Chain Transfer Impedance (with 20 dB Attenuator)

## Standard Configuration

Part Number	Description
A4001-N	ESD Current Target Adapter with N type connector
AT2WN-20	20dB Precision Attenuator
RG4-NS-8	RG400 coax cable N to SMA
A4001-TCC	Traceable Calibration Certificate

## Optional Accessories

Part Number	Description	Specifications
A4001-SMA	ESD Target (IEC61000-4-2 2009)	SMA Connector, with calibration report
AT2WN-6	N Attenuator, 2W, 6 dB	with calibration report
AT2WN-30	N Attenuator, 2W, 30 dB	with calibration report
AT2WS-20	SMA Attenuator, 2W, 20 dB	with calibration report
RG4-SS-8	RG400 Cable SMA-SMA, 0.8 meter	with calibration report
A4001-Repair	Repair target	
A4001-SMA2BNC	Precision SMA-BNC Adapter	
A4001-ReCal	Re-calibration of ESD Target	
A4001-TP	ESD Target Plane	1.2 X 1.2 meter, stainless steel framed
A4001-TSC	ESD Target Plane, Oscilloscope Shielding Cabinet, Power Line Filter	

## 5. Ordering Information

Part Number	Description	Lead Time
A4001	ESD Target standard configuration	1 - 3 days
AT2WN-6	N Attenuator, 2W, 6 dB, DC-18 GHz	1-3 weeks
AT2WN-20	N Attenuator, 2W, 20 dB, DC-18 GHz	1-3 weeks
AT2WN-30	N Attenuator, 2W, 30 dB, DC-18 GHz	1-3 weeks
AT2WS-20	SMA Attenuator, 2W, 20 dB, DC-18 GHz	1-3 weeks
RG4-SS-8	RG400 Cable SMA-SMA, 0.8 meter	1-3 weeks
A4001-Repair	Repair target	1-3 weeks
A4001-SMA2BNC	Precision SMA-BNC Adapter	1-3 weeks
A4001-ReCal	Re-calibration of ESD Target	1-3 days
A4001-TP	ESD Target Plane	2-4 weeks
A4001-TSC	ESD Target Plane, Oscilloscope Shielding Cabinet, Power Line Filter	2-4 weeks