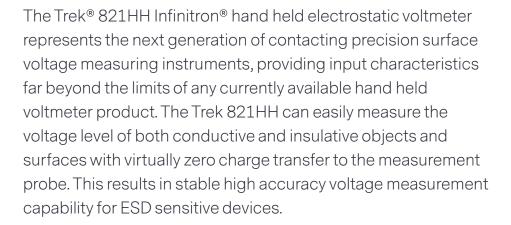




TREK 821HH INFINITRON®

Hand held electrostatic voltmeter to measure the voltage level of both conductive and insulative objects and surfaces with virtually zero charge transfer.



PRODUCT HIGHLIGHTS

- Probe tip assumes the voltage level of the measured object's surface as the tip approaches resulting in no current flow at the time of contact.
- Battery or line operation
- Easy-to-read LCD display
- Records voltage, temperature and humidity with included sensor
- Data graphing capabilities
- NIST-traceable Certificate of Calibration provided with each unit

APPLICATIONS

- Semiconductors
- I FDs
- MR head sensors
- Other ESD sensitive devices



AT A GLANCE

Measurement Range

0 to ±2 kVDC or peak AC

Voltage Display Accuracy

Better than 1% of full scale, ±1 digit

Input Characteristics

Resistance greater than $1 \times 10^{15} \Omega$

Capacitance less than 1 x 10⁻¹⁴ F

Voltage Monitor Output

Scale factor at 1/1000

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TECHNICAL DATA

Performance Specifications		
Measurement Range	0 to ±2 kVDC or peak AC	
Measurement Accuracy	Voltage Monitor Output	Better than ±1% of full scale
	Voltage Display	Better than ±1% of full scale, ±1 digit
Bandwidth	1000 V p-p sine wave: better the	an 700 Hz (-3 db)
Input Characteristics	Resistance greater than 1 x 10 ¹	4 Ω
	Capacitance less than 1 x 10 ⁻¹⁴ F	
	Current less than 1 x 10 ⁻¹⁴ A	
Stability Drift with Time	Less than 2 V/second (probe in	free air)
USB Data Rate	300 ms	

Displayed Information	
Voltage	0 to ±2000 V with a resolution of 1 V
Zero Offset, Battery Status, Time / Date, Temperature, Maximum and Maximum Readings	

Voltage Monitor Output	
An output provides a low-voltage replica of the measured voltage (2.5 mm jack)	
Scale	1/1000th of the measured voltage
Offset Voltage	Less than ±10 mV
Output Noise	Less than 10 mV rms ¹
Speed of Response	Less than 500 μS for an input step change of 1 kV (10% to 90%)

Mechanical Specifications	
Dimensions (H x W x D)	240 x 140 52.5 mm (9.5 x 6 x 2 in)
Weight	1.13 kg (2.5 lb)
Ground Reference Receptacle	Banana Jack
Voltage Monitor Connector	2.5 mm plug

Operation Conditions	
Temperature	15 to 35°C (59 to 95°F)
Relative Humidity	5 to 75%, noncondensing
Altitude	To 2000 m (6561.68 ft)

CE Compliance	
IEC 61010-1	Safety requirements for electrical equipment for measurement, control and laboratory use - Part 1: General requirements
IEC 61326-1	Electrical equipment for measurement, control and laboratory use - Part 1: General requirements

Electrical Specifications	
Power Requirements	Internal NiMH battery or External 15 V @ 1 A Supply / Charger
Battery Operating Time	Greater than six hours of continuous operation

 $^{^{\}bf 1}$ Measured using the true rms feature of the Hewlett Packard Model 34401A digital multimeter



TECHNICAL DATA

Features	
Automatic Shutoff	User settable: 5, 10, or 15 min or disabled
Power ON/OFF	A push-button
Record / Hold	Pressing the Record / Hold push-button will hold the measurement, while pressing and holding the Record / Hold button for a period of greater than 3 seconds will store the measurement

REFERENCE NUMBERS

Included Accessories	
24012	Operator's Manual with Software
-	AC/DC Adapter, 15 V @ 1 A universal AC/DC adapter
-	Output Monitor Cable with 3.5 mm plug
-	USB Cable, Temperature/Relative Humidity Sensor