## Your specialist for electrical **Test and Measurement**

We develop electronic testers from concept to manufacture. Together with you, the product management team at our head office in Glottertal, Germany defines products that will impress you both by their application as well as cost. Our development team in Glottertal and Belgrade, Serbia design excellent technological solutions. We produce high quality at attractive prices in our factories in China and Serbia.

HDT Electronics is proud to be working with many of the worlds leading developers of test & measurement, and we continue to look to support the ever changing needs of the market through innovation and patented solutions.

## **Our locations**



China: Production



## **Our business segments**

**OEM:** We have a portfolio of measuring and testing devices such as voltage testers, multimeters, PV clamp meters and testers for EVSE applications. You can add your logo to these products when you order at least 100 units.

Customer-specific products (ODM): We realise your ideas. Our team will assist you through each step of the way from market research to mass production.

## Certified

HDT's operating sites are regularly inspected, audited and certified.







## **Extensive product range**

for Electric Vehicle (EV) Type 1 Chargers and for PV systems.





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# **USA CleanTech Portfolio** Measurement technology for renewable energies





## **Electric Vehicle Supply Equipment (EVSE) Type 1 Tester**

If Federal emission targets are met, the United States could have over 48 million electric vehicles on the road by 2030. With this demand, the number of Electric Vehicle (EV) Type 1 Chargers is expected to grow to around 30 million by the end of this decade. The number of installations, inspections, and maintenance call outs will also increase exponentially, and to date, traditional test tools just don't allow for quick identification of faults or errors.

Many EV Charger manufacturers and installers have thought about development of such instruments, but whilst non-core to their business, many never reach approval status. So why not let HDT remove this issue, with an instrument already developed and ready for deployment under your brand, to support your team, your approved installers and your customers.

Looking for a custom EVSE tester? We have developed and patented a great basket of ready technologies that can be composed to your specific needs.

#### **HDT 1934**

The perfect instrument to ensure quality installation and maintenance troubleshooting.

#### **Functions include**

- · Confirming EVSE functions are working correctly without an electric vehicle present
- · Simulating Electric Vehicle present
- · Simulating EVSE Charging
- · Simulation of Charge Circuit Interruption Device (CCID) Fault to ensure integral safety devices are working as per manufacturers expectations

#### When connected to a Digital Multimeter, can verify

- · Incoming Voltage
- · Line to Ground Voltage & Line to Line
- Check Proximity Circuit functionality

#### When connected to a isolation tester, can verify

· Safe isolation of the installation

#### When connected to an Oscilloscope can also show

· Pulse Wave Modulation (PWM) at the various Pilot stages





### **BENEFITS TO YOUR BUSINESS INCLUDE**

- Better Installation Compliance
- Reduce Number of False Maintenance truck rolls, thus improving productivity
- Better Customer Satisfaction
- Increased Brand Perception
- Additional Business Revenues
- Reduced Maintenance Costs

Model	1934
PE Pre-Test	yes
CCID Test	yes
CP states	A, B, C, D
CP Error "E"	E
PE Error/ Earth fault	yes
LED indication of L1	yes
Measuring Terminals	L1, L2 (N), PE
CP signal output terminals	2 pcs 4 mm sockets
Fixed connector	SAE J1772 (Type 1, 5P single phase) for measuring purpose
IP	IP40
Safety	CAT II / 300 V
Pollution degree	2
Standards	EN61010-1; EN61851-1
Temperature	0°40° C

## 1500 V DC 1000 A CAT IV **Professional Clamp Meter**

With the continued technical advancements and the need to provide even better systems, the Photovoltaic (PV) market continues to leap forward at a tremendous pace. Many supporting industries are finding it difficult to keep up to pace, and this is true for many test instruments currently available to PV installers. Here at HDT we continue to monitor future trends and try to future proof products for new and emerging market sectors.

With that in mind, we have developed the 30030 Clamp Meter, designed especially for the current needs of PV installers and maintenance technicians. This new product enables engineers to work on all PV systems, whether rooftop, industrial or Utility systems.

#### HDT 30030

#### **Key features**

- · Highest safety category CAT IV 1000 V CAT III 1500 V
- · Voltage measurement AC/ DC up to 1500 V
- · Current measurement AC/DC up to 100 A
- · TRMS
- · Large tear shaped clamp to accomodate busbars

#### **Other Features include**

- · Resistance, Capacity and Frequency measurement
- · Diode test and continuity
- · NCV & LPF
- · Torch light, LCD with backlight
- · Auto-power off, self test





LCD7 Segment, 4 digit display, NCV, APO, LPF, Continuity, Diode, Battery status, Polarity, AC/DC, Hold, Min/Max, Zero, Measuring unitBacklightyesLEDTorch light, NCVVoltage Measurement1 mV1000 V AC TRMS, 1 mV1500 V DCCurrent measurementClamp: 0.11000 A AC TRMS, 0.011000 A DC Jack: 0.1 uA400 uA AC TRMS, DCResistance040 MQCapacitance10 nF100 uFContinuity< 30 R buzzer sound	Model	30030
LEDTorch light, NCVVoltage Measurement1 mV1000 V AC TRMS, 1 mV1500 V DCCurrent measurementClamp: 0.11000 A AC TRMS, 0.011000 A DC Jack: 0.1 uA400 uA AC TRMS, DCResistance040 MQCapacitance10 nF100 uFContinuity< 30 R buzzer sound	LCD	Continuity, Diode, Battery status, Polarity,
Voltage Measurement1 mV1000 V AC TRMS, 1 mV1500 V DCCurrent measurementClamp: 0.11000 A AC TRMS, 0.011000 A DC Jack: 0.1 uA400 uA AC TRMS, DCResistance040 MQCapacitance10 nF100 uFContinuity< 30 R buzzer sound	Backlight	yes
Current measurementClamp: 0.11000 A C TRMS, 0.011000 A DC Jack: 0.1 uA400 uA A C TRMS, DCResistance040 MQCapacitance10 nF100 uFContinuity< 30 R buzzer sound	LED	Torch light, NCV
Current measurementJack: 0.1 uA400 uA AC TRMS, DCResistance040 MQCapacitance10 nF100 uFContinuity< 30 R buzzer sound	Voltage Measurement	1 mV1000 V AC TRMS, 1 mV1500 V DC
CapacitanceDimensionCapacitance10 nF 100 uFContinuity< 30 R buzzer sound	Current measurement	
ContinuityCommetcerContinuity< 30 R buzzer soundDiode01.5 VFrequencyup to 10 MHzJaw opening35 mmLeads connectors distance25 mmTRMSyesPower supply2 x 1.5 V AAANCVyesInrush Current - JawnoLPFyes, 1 KHz/-3 dBTorch LightyesAuto-Power-OffyesBluetoothnoOvervoltage categoryCAT IV / 1000 VIn complicance withIEC 61010-1, IEC 61010-2-032Dimensionapprox. 240 x 81 x 43 mm	Resistance	040 ΜΩ
Diode01.5 VFrequencyup to 10 MHzJaw opening35 mmLeads connectors distance25 mmLeads connectors distance25 mmPower supply2 x 1.5 V AAANCVyesInrush Current - JawnoLPFyes,1 KHz/-3 dBAuto-Power-OffyesSelf TestyesBluetoothnoOvervoltage categoryCAT IV / 1000 VIn complicance withEC 61010-1, IEC 61010-2-032Dimensionapprox. 240 x 81 x 43 mm	Capacitance	10 nF100 uF
Frequencyup to 10 MHzJaw opening35 mmLeads connectors distance25 mmTRMSyesPower supply2 x 1.5 V AAANCVyesInrush Current - JawnoLPFyes,1 KHz/-3 dBTorch LightyesAuto-Power-OffyesBluetoothnoOvervoltage categoryCAT IV / 1000 VIn complicance withIEC 61010-1, IEC 61010-2-032Dimensionapprox. 240 x 81 x 43 mm	Continuity	< 30 R buzzer sound
Jaw opening35 mmLeads connectors distance25 mmTRMSyesPower supply2 x 1.5 V AAANCVyesInrush Current - JawnoLPFyes, 1 KHz/-3 dBTorch LightyesAuto-Power-OffyesSelf TestyesBluetoothnoOvervoltage categoryCAT IV / 1000 VIn complicance withIEC 61010-1, IEC 61010-2-032Dimensionapprox. 240 x 81 x 43 mm	Diode	01.5 V
Leads connectors distance25 mmTRMSyesPower supply2 x 1.5 V AAANCVyesInrush Current - JawnoInrush Current - JawnoLPFyes, 1 KHz/-3 dBTorch LightyesAuto-Power-OffyesSelf TestyesBluetoothnoOvervoltage categoryCAT IV / 1000 VIn complicance withIEC 61010-1, IEC 61010-2-032Dimensionapprox. 240 x 81 x 43 mm	Frequency	up to 10 MHz
TRMSyesPower supply2 x 1.5 V AAANCVyesInrush Current - JawnoIpFyes, 1 KHz/-3 dBTorch LightyesAuto-Power-OffyesSelf TestyesBluetoothnoOvervoltage categoryCAT IV / 1000 VIn complicance withIEC 61010-1, IEC 61010-2-032Dimensionapprox. 240 x 81 x 43 mm	Jaw opening	35 mm
Power supply2 x 1.5 V AAANCVyesInrush Current - JawnoLPFyes,1 KHz/-3 dBTorch LightyesAuto-Power-OffyesSelf TestyesBluetoothnoOvervoltage categoryCAT IV / 1000 VIn complicance withIEC 61010-1, IEC 61010-2-032Dimensionapprox. 240 x 81 x 43 mm	Leads connectors distance	25 mm
NCVyesInrush Current - JawnoInrush Current - JawnoLPFyes, 1 KHz/-3 dBTorch LightyesAuto-Power-OffyesSelf TestyesBluetoothnoOvervoltage categoryCAT IV / 1000 VIn complicance withIEC 61010-1, IEC 61010-2-032Dimensionapprox. 240 x 81 x 43 mm	TRMS	yes
Inrush Current - Jaw   no     LPF   yes, 1 KHz/-3 dB     Torch Light   yes     Auto-Power-Off   yes     Self Test   yes     Bluetooth   no     Overvoltage category   CAT IV / 1000 V     In complicance with   IEC 61010-1, IEC 61010-2-032     Dimension   approx. 240 x 81 x 43 mm	Power supply	2 x 1.5 V AAA
LPFyes, 1 KHz/-3 dBTorch LightyesAuto-Power-OffyesSelf TestyesBluetoothnoOvervoltage categoryCAT IV / 1000 VIn complicance withIEC 61010-1, IEC 61010-2-032Dimensionapprox. 240 x 81 x 43 mm	NCV	yes
Torch Light   yes     Auto-Power-Off   yes     Self Test   yes     Bluetooth   no     Overvoltage category   CAT IV / 1000 V     In complicance with   IEC 61010-1, IEC 61010-2-032     Dimension   approx. 240 x 81 x 43 mm	Inrush Current - Jaw	no
Auto-Power-Off   yes     Self Test   yes     Bluetooth   no     Overvoltage category   CAT IV / 1000 V     In complicance with   IEC 61010-1, IEC 61010-2-032     Dimension   approx. 240 x 81 x 43 mm	LPF	yes, 1 KHz/-3 dB
Self Test   yes     Bluetooth   no     Overvoltage category   CAT IV / 1000 V     In complicance with   IEC 61010-1, IEC 61010-2-032     Dimension   approx. 240 x 81 x 43 mm	Torch Light	yes
Bluetooth   no     Overvoltage category   CAT IV / 1000 V     In complicance with   IEC 61010-1, IEC 61010-2-032     Dimension   approx. 240 x 81 x 43 mm	Auto-Power-Off	yes
Overvoltage categoryCAT IV / 1000 VIn complicance withIEC 61010-1, IEC 61010-2-032Dimensionapprox. 240 x 81 x 43 mm	Self Test	yes
In complicance with       IEC 61010-1, IEC 61010-2-032         Dimension       approx. 240 x 81 x 43 mm	Bluetooth	no
Dimension approx. 240 x 81 x 43 mm	Overvoltage category	CAT IV / 1000 V
	In complicance with	IEC 61010-1, IEC 61010-2-032
Weight approx. 300 g (without batteries)	Dimension	approx. 240 x 81 x 43 mm
	Weight	approx. 300 g (without batteries)