

Electrical PRO 6-Piece Tool Kit



Inspect, Troubleshoot, and Fix Your Home's Electrical Circuits and Wiring



IRT220 Non-Contact 12:1 Infrared Thermometer

Instantly measure an object's surface temperature without making contact. Use the IRT220 to check the electrical panel for any "hot" circuit breakers or check your heating/cooling vents for proper operation.



CBF200 3-in-1 Circuit Breaker Finder

Enables the safe identification of breaker locations within any electrical panel without removing power, check all your outlets for proper wiring, and test GFCI circuits for proper operation.



MM650 True RMS 6000 Count Digital Multimeter

Perfect for checking voltages and diagnosing common wiring problems: continuity, opens, and shorts. The LoZ function on the MM650 checks for ghost voltages.



TT-290 6-in-1 Multifunctional Pliers

8.5" Long Nose Pliers 6-in-1 functionality: Gripping and Looping, Screw Extractor, Wire Stripping (10-18 AWG Solid 12-20 AWG stranded), Wire Cutting (2.0mm), Screw Shearing (6-32 & 8-32), Crimping.



CM1050 True RMS 6000 Clamp Meter

Measure AC and DC current up to 1000A without breaking the circuit by clamping around a single conductor. The VFD function filters frequency and harmonic interference when measuring variable frequency drives.



ET200 AC Line Splitter and GFCI Outlet/Receptacle Tester

Check outlet wiring, measure voltage and allows your clamp meter to measure current (up to 15A) at any outlet without having to break the circuit.

MM650 CAT IV True RMS Multimeter

With Low Input Impedance mode (LoZ)

Features:

- True RMS provides better accuracy on non-sinusoidal or noisy waveforms
- Measures AC/DC Voltage and Current, Resistance, Temperature, Capacitance, Frequency, Diode and Continuity
- μ A Current measurement
- Low input impedance (Lo Z) mode for ACV/DCV measurements to identify ghost voltages
- 6000 count high performance multimeter with 61 segment analog bargraph for trending
- Backlit LCD, Buttons, and Switch Selector
- Min/Max/Avg, Peak Hold, Data Hold and Relative mode
- Auto power off and low battery indicator
- Waterproof, meets IP67 standards
- Built-in Flashlight for added safety in dark spaces
- Rubberized overmolded housing provides impact and drop resistance
- Complete with test leads, temperature probe, (4) AAA batteries, and carrying case
- Optional model complete with Certificate of Traceability to N.I.S.T.
- 3-year warranty

Applications:

- Diagnose common wiring problems; Test batteries, solar cells, wall plugs, and power outlets; Check polarity of wires in wiring installations; Measure input and output resistance of circuits (motors, transformers, resistors); Check continuity of wires, circuits

Specifications

Display counts	6000 count + 61 segment analog bargraph
Basic Accuracy	$\pm 0.5\%$
AC/DC Voltage	1000V
AC/DC Current	10A
AC/DC μ A Current	600 μ A
Resistance	60M
Temperature	-4 to 1400°F (-20 to 760°C)
Capacitance	6000 μ F
Frequency	10kHz
Duty Cycle	0.1 to 99.9%
Low impedance (Lo Z) Mode	Yes
Power	(4) AAA batteries
Waterproof	IP67
Safety Category	CAT IV-600V
Dimensions/Weight	6.7 x 3 x 1.8" (170 x 74 x 45mm) / 7.7oz. (218g)

Ordering Information:

MM650 CATIV True RMS Multimeter
MM650-NIST MM650 Including Certificate of Traceability to N.I.S.T.



NIST
TRACEABLE
CALIBRATION
AVAILABLE



Range selector illuminates to allow for easy selection in dark areas



CM1000 & CM1050 1000A AC & AC/DC True RMS Clamp Meters

True RMS Clamp Meter with Inrush current, Low Pass Filter and LoZ

Features:

- Captures the instantaneous surge (inrush) current when power equipment is turned on
- 1.4" (35mm) clamp jaw
- Low Pass Filter (LPF) for filtering frequency and harmonic interference when measuring variable frequency drives
- LoZ mode for identifying ghost voltages
- Peak voltage measurement with Min/Max
- Built-in Non-Contact Voltage Detector with LED
- Data Hold freezes the display
- Relative Mode for making comparisons to a stored reference value
- Auto power off with disable
- Built-in flashlight
- Includes test leads, Type K thermocouple bead probe, 3 AAA batteries, and carrying case
- 1-year warranty



CM1000

CM1050

Model CM1000:

- Measures 1000A True RMS AC Current

Model CM1050:

- Measures 1000A True RMS AC and DC Current
- DC Zero function

Applications:

Typically when using a multimeter to measure current, you would have to "break the circuit" and place the meter in series with it, so that voltage and current would pass through it. A clamp meter allows you to easily measure current without breaking the circuit by clamping around a single conductor. This saves time and the circuit will not be damaged.

Ordering Information:

- CM1000 1000A AC True RMS Clamp Meter
- CM1000-NIST CM1000 with Certificate of Traceability to NIST
- CM1050 1000A AC/DC True RMS Clamp Meter
- CM1050-NIST CM1050 with Certificate of Traceability to NIST

	CM1000	CM1050
True RMS	√	√
Display counts	6000 count	6000 count
AC Current	1000A	1000A
ACA Accuracy	±2.8%	±2.8%
DC Current	—	1000A
AC/DC Voltage	1000V	1000V
Resistance	60MΩ	60MΩ
Temperature	-4 to 1832°F (-20 to 1000°C)	-4 to 1832°F (-20 to 1000°C)
Capacitance	100mF	100mF
Frequency	100kHz	100kHz
Duty Cycle	10.0 to 90.0%	10.0 to 90.0%
Continuity	<50Ω	<50Ω
Low Pass Filter (LPF)	Yes	Yes
LoZ	Yes	Yes
NCV Detector	>90V	>90V
Inrush Current	100ms	100ms
Safety Category	CAT IV-600V	CAT IV-600V
Dimensions	9.9 x 3.2 x 1.7" (249 x 81.5 x 42.2mm)	9.9 x 3.2 x 1.7" (249 x 81.5 x 42.2mm)
Weight	11.3oz (320g)	11.5oz (327g)



ET200 AC Line Splitter and GFCI Receptacle Tester

Two very useful and necessary tools for residential and commercial electricians, home inspectors, and do-it-yourselfers

Features:

- Combines a GFCI Receptacle Tester and AC Line Splitter in one tool
- Line splitter features:
 - Check outlet wiring, measure voltage, and use your clamp meter to measure current up to 15A without breaking the circuit
 - Clamp around the 1X position for a direct current reading
 - Use the 10X position to display low current readings multiplied by 10
- Receptacle Tester Features:
 - Test GFCI for proper operation
 - Detect faulty wiring in 3-wire receptacles
 - Lights display 5 wiring faults: Open Ground, Open Neutral, Hot/Ground Reverse, Open Hot, Hot/Neutral Reverse
 - Easy to read fault label on both sides for receptacles with ground up or ground down installation



Specifications

Input Voltage	120V ± 10%
Current	Maximum 15A
Safety Category	CAT II 300

Ordering Information:

ET200 AC Line Splitter and GFCI Receptable Tester



CBF200 3-in-1 Circuit Breaker Finder

Circuit Breaker Finder, GFCI Receptacle Tester and Non-Contact Voltage (NCV) Detector

Features:

- Safely identify and label breaker locations within any electrical panel without removing power
- Comparison mode helps to identify the correct breaker with the signal strengths are very close
- Detect faulty wiring in 3-wire receptacles
- Lights display 6 wiring faults:
Open Ground, Open Neutral, Hot/Ground Reverse, Open Hot, Hot/Neutral Reverse, Hot on Neutral with Hot Open
- Test GFCI for proper operation
- Built-in Non-Contact Voltage Detector (80-300V, CAT III-300V)
- One person operation
- Includes Transmitter, Receiver and 9V Battery
- cETLus listed



Applications:

- Useful, one person operation tool for residential and commercial electricians, home inspectors, kitchen and bath installers, apartment/condo property managers, DIY'ers and handymen

Specifications

Transmitter	
Voltage	120VAC Single Phase Two Wires (Live, Neutral) with Ground
Frequency	47 ~ 63 Hz
GFCI Leakage Current	7mA @ 120VAC
Safety Standard	CAT II 300V
Receiver	
Battery	9V Alkaline x 1
Auto Shut Down	After 10 minutes without any operation
Non-Contact Voltage Detection	24-300VAC
Safety Standard	CAT III 300V
Transmitter Dimensions	4.7 x 2.5 x 1.3" (118.5 x 63 x 32mm)
Receiver Dimensions	5.1 x 2.4 x 1.5" (130 x 62 x 36.9mm)
Weight	9.8oz (260g)



Ordering Information:

CBF200 3-in-1 Circuit Breaker Finder



IRT220 Non-Contact 12:1 Laser IR Thermometer

Instantly measure the temperature with Min/Max of objects without making contact

Features:

- Built-in laser identifies the measurement area
- Backlit LCD display with selectable °F or °C readout
- 0.95 fixed emissivity
- Min/Max to monitor lowest and highest measurement readings
- Automatic Data Hold
- Auto power off after 10 seconds
- Complete with 9V battery
- Optional model complete with Certificate of Traceability to N.I.S.T.
- 1-year warranty

Applications:

- Measure the surface temperature of objects that are too hot to touch or hard to reach
- Measure moving objects



NIST
TRACEABLE
CALIBRATION
AVAILABLE

Specifications

Temperature Range	-4 to 932°F (-20 to 500°C)
Accuracy	±2%
Resolution	0.1°F/°C
Distance to Target Ratio	12:1
Response Time	500ms
Emissivity	0.95 fixed
Power	9V battery
Dimensions	5.4 x 2.9 x 1.5" (137 x 73 x 39mm)
Weight	5.2oz (148.5g)



Ordering Information:

IRT220 Non-Contact 12:1 Laser IR Thermometer
IRT220-NIST IRT220 Including Certificate of Traceability to N.I.S.T.

CE

TT-290 6-in-1 Multifunctional Pliers

Needle Nose Plier cuts, strips and crimps

Features:

- Polished, Chrome Vanadium material
- Drop Forged & Heat Treated for exceptional strength & durability
- 6 in 1 Functions
 1. Gripping and Looping
 2. Screw Extractor
 3. Stripping 10-18 AWG Solid 12-20 AWG stranded
 4. Wire Cutting 2.0mm
 5. Screw Shearing: 6-32 & 8-32 screw
 6. Crimping
- Comfortable grip & handle material: Thermoplastic Rubber
- Size: 8.5" (212mm)
- Weight: 282g
- 1 year warranty



Ordering Information:

TT-290 8.5" Multifunctional Pliers