

Tough Digital Clamp Meters



True RMS
Measurement
Technology



Includes:

- Carrying case
- Test leads with CAT III/CAT IV safety caps
- Thermocouple with adapter (temperature-measuring models only)
- Batteries

- CAT IV 600V, CAT III 1000V, Class 2, Double insulation safety rating
- Built to withstand a 6.6 ft. (2 m) drop
- Meets requirements for use in basic and controlled electromagnetic environments like residential, office and light-industrial locations

- The **CL600** is an auto-ranging TRMS digital clamp meter that measures AC current via the clamp, and measures AC/DC voltage, resistance, continuity, and tests diodes via test leads
- The **CL700** is an auto-ranging TRMS digital clamp meter that measures AC current via the clamp, and measures AC/DC voltage, resistance, continuity, frequency, capacitance, and tests diodes via test leads, and temperature via a thermocouple probe. It also features a Low Impedance (LoZ) mode for identifying and eliminating ghost or stray voltages
- The **CL800** is an auto-ranging TRMS digital clamp meter that measures AC/DC current via the clamp, and measures AC/DC voltage, resistance, continuity, frequency, capacitance, and tests diodes via test leads, and temperature via a thermocouple probe. It also features a Low Impedance (LoZ) mode for identifying and eliminating ghost or stray voltages



Features	CL600	CL700	CL800
Drop Protection	6.6 ft. (2 m)	6.6 ft. (2 m)	6.6 ft. (2 m)
Ingress Protection	IP40	IP40	IP40
Safety	CAT IV 600V CAT III 1000V	CAT IV 600V CAT III 1000V	CAT IV 600V CAT III 1000V
AC Voltage (Volts)	1000V	1000V	1000V
DC Voltage (Volts)	1000V	1000V	1000V
AC Current (Amps)	600A	600A	600A
DC Current (Amps)	—	—	600A
Ohms (Resistance)	60MΩ	60MΩ	60MΩ
AC Millivolts	—	—	—
DC Millivolts	•	•	•
True RMS	•	•	•
Audible Continuity	•	•	•
Backlight	•	•	•
Temperature	—	-14° – 1000°F (-26° – 538°C)	-14° – 1000°F (-26° – 538°C)
Low Impedance	—	•	•
Non-Contact Voltage Testing	•	•	•
Auto Ranging	•	•	•
Range Hold	•	•	•
Data Hold	•	•	•
Diode Test	•	•	•
Capacitance Test	—	6000 μF	6000 μF
Frequency / Duty Cycle	—	1Hz – 500 KHz	1Hz – 500 KHz
Max / Min	•	•	•
Magnetic Mount	Available As Accessory	Available As Accessory	Available As Accessory
Worklight	—	—	•
Auto-Power Off	•	•	•
LCD Display Count	6000	6000	6000

Specifications are subject to change.
See page 295 for additional information on warnings.



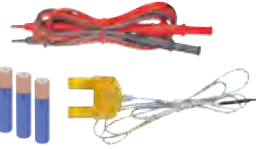
See warning section on page 193 for important safety information regarding clamp meters

Digital Clamp Meters



Includes:

- Carrying case
- Test leads with CAT III/CAT IV safety caps
- Thermocouple (temperature-measuring models only)
- Batteries



- CAT III 600V, Class 2, Double insulation safety rating
- Backlit display for clear readings
- Low battery indicator and easily accessible battery compartment
- Meets requirements for use in basic and controlled electromagnetic environments like residential, office and light-industrial locations
- Built to withstand a 3.3 ft. (1 m) drop

- The **CL110** is an auto-ranging digital clamp meter that measures AC current via the clamp, and AC/DC voltage, resistance and continuity via test leads
- The **CL210** is an auto-ranging digital clamp meter that measures AC current via the clamp, AC/DC voltage, resistance and continuity via test leads, and temperature via a thermocouple probe
- The **CL312** is an automatically ranging true root mean square (TRMS) digital clamp meter that measures AC current via the clamp, AC/DC voltage, DC microamps, resistance, continuity, frequency, capacitance, and tests diodes via test-leads, and temperature via a thermocouple probe. Features include Auto Range to improve efficiency and speed when making measurements; Diode Test to troubleshoot malfunctioning diodes; Max/Min to understand the variability from average of an electrical property being measured, and DC Microamps measurements when working with flame sensors
- The **CL330** is an auto-ranging True Root-Mean-Squared (TRMS) digital clamp meter that measures AC current via the clamp, AC/DC voltage, resistance, continuity, frequency, capacitance, and tests diodes via test-leads, and temperature via a thermocouple probe. It features a super bright high visibility dual-line OLED display screen that optimizes viewability in dark or bright environments and when viewed at indirect angles

High-Visibility Display



Features	CL110	CL210	CL312	CL330
Drop Protection	3.3 ft. (1 m)	3.3 ft. (1 m)	3.3 ft. (1 m)	3.3 ft. (1 m)
Ingress Protection	—	—	—	—
Safety	CAT III 600V	CAT III 600V	CAT III 600V	CAT III 600V
AC Voltage (Volts)	600V	600V	600V	600V
DC Voltage (Volts)	600V	600V	600V	600V
AC Current (Amps)	400A	400A	400A	400A
DC Current (Amps)	—	—	—	—
Ohms (Resistance)	20MΩ	20MΩ	40MΩ	40MΩ
AC Millivolts	•	•	—	—
DC Millivolts	•	•	•	•
DC Microamps	—	—	•	—
True RMS	—	—	•	•
Audible Continuity	•	•	•	•
Backlight	•	•	•	•
Temperature	—	-40° – 1832°F (-40° – 1000°C)	-40° – 1832°F (-40° – 1000°C)	-40° – 1832°F (-40° – 1000°C)
Auto Ranging	•	•	•	•
Range Hold	•	•	•	•
Data Hold	•	•	•	•
Diode Test	—	—	•	•
Capacitance Test	—	—	4000 μF	4000 μF
Frequency / Duty Cycle	—	—	10Hz – 1MHz	10Hz – 1MHz
Max / Min	MAX only	MAX only	•	•
Magnetic Mount	—	—	—	—
Worklight	—	—	—	—
Auto-Power Off	•	•	•	•
LCD Display Count	2000	2000	4000	—
OLED Display Count	—	—	—	4000
Bar Graph	—	—	—	•



Clamp Meters

Clamp Meter Specifications

Cat. No.	Batteries	Jaw Size	Standard	Included	Overall Length	Overall Height	Overall Width	Weight
CL110	3 x AAA	1-1/8" (28.6 mm)	CAT III 600V; CE Certified	Carrying Case, 41" (1041.4 mm) Test Leads and Batteries	8-45/64" (221.1 mm)	1-39/64" (40.9 mm)	3-1/64" (76.6 mm)	0.63 lb (0.29 kg)
CL210	3 x AAA	1-1/8" (28.6 mm)	CAT III 600V; CE Certified	Carrying Case, 41" (1041.4 mm) Test Leads, Thermocouple with Adapter, and Batteries	8-45/64" (221.1 mm)	1-39/64" (40.9 mm)	3-1/64" (76.6 mm)	0.63 lb (0.29 kg)
CL312 NEW!	3 x AAA	1-1/8" (28.6 mm)	CAT III 600V; CE Certified	Carrying Case, Test Leads, Thermocouple, Batteries	8-45/64" (221.1 mm)	1-39/64" (40.9 mm)	3-1/64" (76.6 mm)	0.63 lb (0.3 kg)
CL330	3 x AAA	1-1/8" (28.6 mm)	CAT III 600V, Class 2, Double insulation	Pouch, 41" (1041.4 mm) Test Leads, Thermocouple, and Batteries	8-21/32" (219.9 mm)	1-39/64" (40.9 mm)	3-1/64" (76.6 mm)	0.90 lb (0.41 kg)
CL600	2 x AAA	1-3/8" (34.9 mm)	CAT IV 600V; CE Certified	Carrying Case, 41" (1041.4 mm) Test Leads and Batteries	9-3/32" (231.0 mm)	1-35/64" (39.3 mm)	3-13/16" (96.8 mm)	0.74 lb (0.33 kg)
CL700	2 x AAA	1-3/8" (34.9 mm)	CAT IV 600V; CE Certified	Carrying Case, Test Leads, Thermocouple with Adapter, and Batteries	9-3/32" (231.0 mm)	1-35/64" (39.3 mm)	3-13/16" (96.8 mm)	0.74 lb (0.33 kg)
CL800	2 x AAA	1-3/8" (34.9 mm)	CAT IV 600V; CE Certified	Carrying Case, 41" (1041.4 mm) Test Leads, Thermocouple with Adapter, and Batteries	9-3/32" (231.0 mm)	1-35/64" (39.3 mm)	3-13/16" (96.8 mm)	0.78 lb (0.35 kg)

Electrical Maintenance & Test Kit

- Cat. No. RT210 detects the most common wiring problems in standard and GFCI receptacles including open ground, reverse polarity, open hot, open neutral, and hot/ground reversed
- Cat. No. 69409 Line splitter 10x allows the measuring of current draw up to 15A without splitting the load's power cord
- Cat. No. CL110 has CAT III 600V, Class 2, Double insulation safety rating and features a backlit display for clear readings
- RT210 withstands a 6.6 ft. (2 m)
- Includes a carrying case, test leads and batteries



Cat. No.	Set Contains				Weight
CL110KIT					0.94 lb (0.43 kg)
Cat. No.	Overall Length	Overall Height	Overall Width	Batteries	
CL110	8-45/64" (221.1 mm)	1-39/64" (40.9 mm)	3-1/64" (76.6 mm)	3 x AAA	
RT210	1-5/8" (41.3 mm)	2-7/8" (73.0 mm)	1-7/8" (47.6 mm)	—	
69409	4.67" (118.61 mm)	4-43/64" (118.7 mm)	2-9/32" (57.9 mm)	—	



CL110KIT

⚠️ WARNINGS:

To ensure safe operation and service of the tester, follow these instructions. Failure to observe these warnings can result in severe injury or death.

- Before each use, verify meter operation by measuring a known voltage or current.
- Never use the meter on a circuit with voltages that exceed the category based rating of this meter.
- Do not use the meter during electrical storms or in wet weather.
- Do not use the meter or test leads if they appear to be damaged.
- Ensure meter leads are fully seated, and keep fingers away from the metal probe contacts when making measurements.
- Do not open the meter to replace batteries while the probes are connected.
- Use caution when working with voltages above 60V DC, or 25V AC RMS. Such voltages pose a shock hazard.
- To avoid false readings that can lead to electrical shock, replace batteries if a low battery indicator appears.
- Unless measuring voltage or current, shut off and lock out power before measuring resistance or capacitance.
- Always adhere to local and national safety codes. Use individual protective equipment to prevent shock and arc blast injury where hazardous live conductors are exposed.



Specialty Clamp Meters

Differential Temperature Clamp Meter

NEW!

Includes:

- Carrying case
- Test leads with CAT III/CAT IV safety caps
- Two Type K thermocouples
- 3 x AAA Batteries



- **CL450** HVAC Clamp Meter is an automatically ranging true root mean square (TRMS) digital clamp meter that measures differential temperature via K-Type thermocouple probes; AC current and Inrush current via the clamp; AC/DC voltage, DC Microamps, resistance, continuity, frequency, capacitance, and test diodes via test leads.



2000A Digital Clamp Meter

NEW!

Includes:

- Carrying Case
- Instruction Manual
- Straight Input Test Leads
- 2 x AAA Batteries



- **CL900** is an auto-ranging, true root mean square (TRMS) 2000A digital clamp meter that measures AC/DC current via the clamp and measures AC/DC voltage, resistance, continuity, frequency, duty cycle, capacitance, and tests diodes via test leads. It features a Low Impedance (LoZ) mode for identifying and eliminating ghost or stray voltages, and has a dedicated mode for capturing Inrush Current.



Features	CL450	CL900
Drop Protection	6.6 ft. (2 m)	6.6 ft. (2 m)
Ingress Protection	—	IP40
Safety	CAT IV 600V CAT III 1000V	CAT IV 600V CAT III 1000V
AC Voltage (Volts)	1000V	1000V
DC Voltage (Volts)	1000V	1000V
AC + DC Voltage	•	—
AC Current (Amps)	600A	•
DC Current (Amps)	—	•
Ohms (Resistance)	60MΩ	60MΩ
DC Millivolts	•	—
DC Microamps	•	•
True RMS	•	•
Non-Contact Voltage Testing	•	•
Low-Pass Filter	•	—
Low Impedance	•	•
Inrush Current	•	•
Audible Continuity	•	•
Backlight	•	•
Differential Temperature	-40° – 1832°F (-40° – 1000°C)	—
Digital Temperature Calibration	•	—
Auto Ranging	•	•
Range Hold	•	•
Data Hold	•	•
Diode Test	•	•
Capacitance Test	•	•
Frequency / Duty Cycle	•	•
Max / Min	•	•
Relative Mode	•	—
Auto-Power Off	•	•
LCD Display Count	6000	6000

Cat. No.	Batteries	Jaw Size	Standard	Included	Overall Length	Overall Height	Overall Width	Weight
CL450 NEW!	3 x AAA	1-5/8" (41.3 mm)	CAT IV 600V: CE Certified	Carry Case, Test Leads, 2 Type K Thermocouples, Batteries	10" (250.0 mm)	1-9/16" (39.7 mm)	3-3/4" (95.3 mm)	13.6 oz (386 g)
CL900 NEW!	2 x AAA	2" (50.4 mm)	CAT IV 600V, CAT III 1000V	Carrying Case, Instruction Manual, Straight Input Test Leads, Batteries	10-25/64" (264.2 mm)	1-45/64" (44.1 mm)	3.9" (99.1 mm)	17.6oz (499 g)



Tough Digital Multimeters

**TOUGH
METER**



Includes:

- Carrying case
- Test leads with CAT III/CAT IV safety caps
- Alligator clips
- Thermocouple with adapter
- Batteries



- Backlit LCD display screen
- CAT IV 600V safety rating
- Built to withstand a 6.6' (2 m) drop
- For use in basic and controlled electromagnetic environments like residential, office and light-industrial locations
- Low battery indicator and easily accessible battery and fuse replacement compartment

- The **MM600** is an auto-ranging digital multimeter that measures AC/DC voltage, AC/DC current, and resistance. It also measures temperature, capacitance, frequency, duty-cycle, tests diodes and continuity
- The **MM700** is an auto-ranging True Root-Mean-Squared (TRMS) digital multimeter that measures AC/DC voltage, AC/DC current, and resistance. It also measures temperature, capacitance, frequency, duty-cycle, and tests diodes and continuity



Features	MM600	MM700
Drop Protection	6.6 ft. (2 m)	6.6 ft. (2 m)
Ingress Protection	IP42	IP42
Safety	CAT IV 600V CAT III 1000V	CAT IV 600V CAT III 1000V
AC Voltage (Volts)	1000V	1000V
DC Voltage (Volts)	1000V	1000V
AC Current (Amps)	10A	10A
DC Current (Amps)	10A	10A
Ohms (Resistance)	40MΩ	40MΩ
DC Millivolts	•	•
AC Milliamperes	•	•
DC Milliamperes	•	•
AC Microamperes	•	•
DC Microamperes	•	•
True RMS	—	•
Audible Continuity	•	•
Backlight	•	•
Temperature	0° – 1000°F (-18° – 538°C)	0° – 1500°F (-18° – 816°C)
Low Impedance	—	•
Auto Ranging	•	•
Range Hold	•	•
Data Hold	•	•
Diode Test	•	•
Capacitance Test	1000 μF	4000 μF
Frequency / Duty Cycle	1Hz – 500 KHz	1Hz – 500 KHz
Max / Min	•	•
Lead Warning	•	•
Bar Graph	—	•
Magnetic Mount	Available As Accessory	Available As Accessory
Auto-Power Off	•	•
Battery Test	—	—
LCD Display Count	4000	4000

Specifications are subject to change.
See page 295 for additional information on warnings.



See warning section on page 197 for important safety information regarding multimeters

Digital Multimeters



Includes:

- Test leads with CAT III/CAT IV safety caps
- Thermocouple with adapter (temperature-measuring models only)
- Batteries



- CAT III 600V safety rating
- Built to withstand a 3.3 ft. (1 m) drop
- For use in basic and controlled electromagnetic environments like residential, business and light-industrial locations
- Low battery indicator and easily accessible battery compartment

- The **MM300** is a manual-ranging digital multimeter that measures AC/DC voltage, DC current, and resistance. It also tests diodes and continuity, and has a battery test mode
- The **MM400** is an auto-ranging digital multimeter that measures AC/DC voltage, AC/DC current, and resistance. It also measures temperature, capacitance, frequency, duty-cycle, and tests diodes and continuity



Features	MM300 Manual Ranging	MM400 Auto Ranging
Drop Protection	3.3 ft. (1 m)	3.3 ft. (1 m)
Ingress Protection	—	—
Safety	CAT III 600V	CAT III 600V
AC Voltage (Volts)	600V	600V
DC Voltage (Volts)	600V	600V
AC Current (Amps)	—	10A
DC Current (Amps)	10A	10A
Ohms (Resistance)	20MΩ	40MΩ
DC Millivolts	•	•
AC Milliamps	—	•
DC Milliamps	•	•
AC Microamps	—	•
DC Microamps	•	•
True RMS	—	—
Audible Continuity	•	•
Backlight	—	•
Temperature	—	0° – 1000°F (-18° – 538°C)
Low Impedance	—	—
Auto Ranging	—	•
Range Hold	—	•
Data Hold	•	•
Diode Test	•	•
Capacitance Test	—	200 μF
Frequency / Duty Cycle	—	1Hz – 50 KHz
Max / Min	—	•
Lead Warning	—	—
Bar Graph	—	—
Magnetic Mount	Available As Accessory	Available As Accessory
Auto-Power Off	—	•
Battery Test	•	—
LCD Display Count	2000	4000



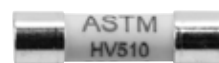


Multimeters

Multimeter Specifications

Cat. No.	Batteries	Standard	Included	Overall Length	Overall Height	Overall Width	Weight
MM300	2 x AAA	CAT III 600V	Test Leads and Batteries	6" (152.4 mm)	1-25/32" (45.2 mm)	3-1/6" (77.8 mm)	0.51 lb (0.23 kg)
MM400	2 x AAA	CAT III 600V	Test Leads, Batteries and Thermocouple	6" (152.4 mm)	1-25/32" (45.2 mm)	3-1/6" (77.8 mm)	0.51 lb (0.23 kg)
MM600	2 x AAA	CAT IV 600V	Carrying Case, Test Leads, Thermocouple, and Batteries	7" (177.8 mm)	2-3/32" (53.2 mm)	3-35/64" (90.1 mm)	0.90 lb (0.41 kg)
MM700	2 x AAA	CAT IV 600V	Carrying Case, Test Leads, Thermocouple, Batteries, and Alligator Clips	7" (177.8 mm)	2-3/32" (53.2 mm)	3-35/64" (90.1 mm)	0.90 lb (0.41 kg)

Multimeter Replacement Fuses



69033



69192

Cat. No.	For Use With	Fuse Type
69191	MM1000, MM1300, MM2000, MM2300, MM6000	F 11A/1000V
69192	MM1000, MM1300, MM2000, MM2300, MM6000	F 440mA/1000V
69193	MM100 Fuse Kit	F10A/500V, F250mA/250V
69194	MM200 Fuse Kit	F10A/500V, F400mA/250V
69031	MM300	5x20 200MA 600V
69032	MM300, MM400	6x32 10A 600V
69033	MM400	5x20 500MA 600V
69034	MM600, MM700	10x38 10A 1000V
69035	MM600, MM700	6x32 500MA 1000V

Electrical Test Kit

- The MM300 multimeter was developed to withstand daily wear and tear on the job site, and has a safety rating of CAT III 600V, Class 2, Double insulation
- The NCVT-1 has a bright green LED to indicate the tester is working; it changes to red and warning tones sound when voltage is detected
- NCVT-1 has a digitally-controlled ON/OFF power button and auto power-off feature to conserve and extend battery life
- Receptacle tester detects wiring configurations and indicates correct wiring, open ground, open hot, open neutral, hot/ground reversed; it does not indicate quality of ground, multiple hot wires, or a combination of defects
- Includes visual and audible continuity indicators up to 25Ω
- Includes test leads and batteries



Cat. No.	Set Contains	Weight
69149		0.94 lb (0.43 kg)

Cat. No.	Overall Length	Overall Height	Overall Width	Batteries
MM300	6" (152.4 mm)	1-25/32" (45.2 mm)	3-1/6" (77.8 mm)	2 x AAA
NCVT-1	5-1/2" (139.7 mm)	1" (25.4 mm)	23/32" (18.3 mm)	2 x AAA
Receptacle Tester	2-3/4" (69.9 mm)	1" (25.4 mm)	1-1/2" (38.1 mm)	—



69149

⚠ WARNINGS:

To ensure safe operation and service of the tester, follow these instructions. Failure to observe these warnings can result in severe injury or death.

- Before each use, verify meter operation by measuring a known voltage or current.
- Never use the meter on a circuit with voltages that exceed the category based rating of this meter.
- Do not use the meter during electrical storms or in wet weather.
- Do not use the meter or test leads if they appear to be damaged.
- Ensure meter leads are fully seated, and keep fingers away from the metal probe contacts when making measurements.
- Do not open the meter to replace batteries while the probes are connected.
- Use caution when working with voltages above 60V DC, or 25V AC RMS. Such voltages pose a shock hazard.
- To avoid false readings that can lead to electrical shock, replace batteries if a low battery indicator appears.
- Unless measuring voltage or current, shut off and lock out power before measuring resistance or capacitance.
- Always adhere to local and national safety codes. Use individual protective equipment to prevent shock and arc blast injury where hazardous live conductors are exposed.



Electrical Testers

Electronic Voltage Testers

NEW!

- Cat. No. ET60 includes test leads
- Cat. Nos. ET250 and ET260 include test leads and batteries
- **ET60** is a solid-state, low impedance, electronic voltage tester that measures AC/DC voltages up to 600V. It does NOT require batteries - it is powered by the applied voltage. This tough meter design is water and dust resistant, and withstands a 9.8 ft (3 m) drop.
- **ET250** Digital AC/DC Voltage and Continuity Tester is a solid-state, digital voltage and continuity tester that measures AC/DC voltages up to 600V and tests for continuity. Additionally, the ET250 also tests GFCI protected circuits to verify that the GFCI device is functioning appropriately. This tester includes a backlight and integrated flashlight for working in reduced ambient lighting conditions. It automatically selects the measurement mode, and auto-powers on when a voltage/continuity measurement is attempted. This tough meter design is water and dust resistant, and withstands a 9.8 ft (3 m) drop.
- **ET260** Digital AC/DC Voltage and Continuity Tester is a solid-state, digital voltage and continuity tester that measures AC/DC voltages up to 690V and tests for continuity. The tester includes a backlight, integrated flashlight, and has built in test lead holders. It automatically selects the measurement mode and auto-powers on when a voltage/continuity measurement is attempted. This tough meter design is water and dust resistant, and withstands a 9.8 ft (3 m) drop.



Cat. No.	Batteries	Voltage	Standard	Overall Length	Overall Width	Weight
ET60 NEW!	Not Required	12 to 600 V AC/DC	CAT IV 600V	5-43/64" (144.1 mm)	2-11/32" (59.5 mm)	3.2 oz (92 g)
ET250 NEW!	3 x AAA	2 to 600V AC/DC	CAT IV 600V	6-1/16" (154.0 mm)	2-5/16" (58.7 mm)	6.0 oz (170 g)
ET260 NEW!	3 x AAA	2 to 690V AC/DC	CAT IV 600V; CAT III 690V	6-1/16" (154.0 mm)	2-5/16" (58.7 mm)	6.0 oz (170 g)

Digital Circuit Breaker Finder

- Quickly, accurately, and automatically find the corresponding circuit breaker of any standard 120V outlet
- For use on powered circuits only
- Does not require interruption of service
- Bright green arrow and loud beep provide clear indication of correct breaker
- Strong transmitter reaches distances up to 1000 ft. (305 m)
- Optional Circuit Breaker Finder Accessory Kit (Cat. No. 69411) refer to page 200: Find breakers of light fixtures and bare wires with light socket and alligator clip adapters



ET300



Cat. No.	Overall Length	Overall Height	Overall Width	Weight
ET300	Receiver: 6" (152.4 mm) Transmitter: 2-51/64" (71.0 mm)	29/32" (23.0 mm)	Receiver: 2" (50.8 mm) Transmitter: 1-57/64" (48.0 mm)	0.20 lb (0.09 kg)





Electrical Testers

Non-Contact Voltage Testers

- CAT IV safety rating
- Auto power-off
- Convenient pocket clip
- Does not detect DC voltage
- **NCVT-1/NCVT-2** provide non-contact detection of standard voltage 50 to 1000V AC in cables, cords, circuit breakers, lighting fixtures, switches, outlets and wires. **NCVT-2** also detects and indicates low voltage (12 to 48V AC) in security, entertainment, communications, environmental and irrigation systems
- **NCVT-3** features a flashlight, and provides non-contact detection of voltage 12 to 1000V AC with simultaneous visual and audible voltage indicators
- **NCVT-4IR** is designed for HVAC applications and hot spots in panels, includes an infrared thermometer with selectable °F/°C from -20 to 482°F (-30 to 250°C), LCD backlit display, and convenient laser pointer to help target 4:1 distance to spot ratio for temperature
- **NCVT-5** has dual-mode non-contact detection of voltage 12 to 1000V AC or 70 to 1000V AC with visual and audible voltage indicators and a bright integrated laser pointer that can operate independently from non-contact functionality



NCVT-1



NCVT-2



NCVT-3

NEW!



NCVT-4IR

NEW!



NCVT-5

Features	NCVT-1	NCVT-2	NCVT-3	NCVT-4IR	NCVT-5
Drop Protection	10 ft. (3 m)	10 ft. (3 m)	6.6 ft. (2 m)	6.6 ft. (2 m)	10 ft. (3 m)
Ingress Protection	IP40	IP40	IP67	IP54	IP67
Safety	CAT IV 1000V	CAT IV 1000V	CAT IV 1000V	CAT IV 1000V AC	CAT IV 1000V AC
Voltage	50-1000V AC	Mode 1: 12-48V AC Mode 2: 48-1000V AC	12-1000V AC	12-1000V AC	Mode 1: 70-1000V AC Mode 2: 12-1000V AC
Frequency Range	50-500Hz	50-500Hz	50-500Hz	50-500Hz	50-500Hz
Audible and Visual Alarms	•	•	•	•	•
Auto-Power Off	•	•	•	•	•
Temperature	—	—	—	-22° - 482°F (-30° - 250°C)	—
Laser	—	—	—	Class 2	Class 3a
Flashlight	—	—	•	—	—
Backlight	—	—	—	•	—
LCD Display	—	—	—	•	—
Batteries	2 x AAA	2 x AAA	2 x AAA	2 x AAA	2 x AAA

Cat. No.	Voltage	Frequency	Batteries	Overall Length	Overall Height	Overall Width	Weight
NCVT-1	50 - 1000V AC	50 - 500 Hz	2 x AAA	5-1/2" (139.7 mm)	1" (25.4 mm)	23/32" (18.3 mm)	0.80 oz (22.7 g)
NCVT-2	12 - 1000V AC	50 - 500 Hz	2 x AAA	5-1/2" (139.7 mm)	1" (25.4 mm)	23/32" (18.3 mm)	0.80 oz (22.7 g)
NCVT-3	12 - 1000V AC	50 - 500 Hz	2 x AAA	5-53/64" (148.0 mm)	1-5/32" (29.4 mm)	23/32" (18.3 mm)	1.2 oz (34 g)
NCVT-4IR NEW!	12 - 1000V AC	50 - 500 Hz	2 x AAA	6-1/4" (158.8 mm)	1-1/4" (31.8 mm)	1-3/16" (30.2 mm)	2.0 oz (57 g)
NCVT-5 NEW!	12 - 1000V AC	50 - 500 Hz	2 x AAA	5.686" (144.4 mm)	1.152" (29.3 mm)	.958" (24.3 mm)	1.5 oz (43 g)



Electrical Testers

Receptacle Testers

- Light sequence indicates correct/incorrect wiring
- Conforms to UL Std 1436, Certified to CSA Std C22.2 #160
- Operating temp: 32°F to 140°F (0°C to 40°C)
- Built to withstand a 6.6 ft. (2m) drop
- Nominal Voltage: 110/125V AC at 50/60Hz in 3-wire outlet
- Designed to detect the most common wiring problems in standard receptacles
- Cat. No. RT210 works on GFCI outlets and confirms operation of the ground fault

Cat. No.	GFCI	Overall Length	Overall Height	Overall Width	Weight
RT110	No	1-5/8" (41.3 mm)	2-7/8" (73.0 mm)	1-7/8" (47.6 mm)	0.12 lb (0.06 kg)
RT210	Yes	1-5/8" (41.3 mm)	2-7/8" (73.0 mm)	1-7/8" (47.6 mm)	0.12 lb (0.06 kg)



RT110

RT210

Continuity Tester



69133

- Quickly reveals shorts or broken circuits in all types of electrical devices and controls
- Tests for continuity of circuit with power off
- Bulb in handle glows when circuit is complete (bulb included)
- Pointed 3-3/4" (95 mm) probe gets right to the problem
- Deluxe 4" (102 mm) long handle with removable nylon cap holds replaceable bulb and battery
- 36" (915 mm) test lead with alligator clip
- Uses one AAA battery (not included)
- Proudly built in U.S.A. with global components

Cat. No.	Overall Length	Weight
69133	43-3/4" (111.1 cm)	0.21 oz (6.0 g)
Replacement Part		
69131	Replacement Bulb for Cat. No. 69133	0.05 oz (1.4 g)

Circuit Tester



69105

- Tests circuits rated from 80 to 600 volts AC/DC
- High-visibility neon lamp indicator
- High-impact, sealed 5-11/16" (144 mm) probe on long 24" (610 mm) leads for convenience in testing motors, fuses, relays, switches, etc.
- Resistor between each probe and lead

Cat. No.	Overall Length	Weight
69105	35" (889.0 mm)	0.15 lb (0.07 kg)

Low-Voltage Tester



69127

Device for checking live 6-24V, AC or DC circuits

- Tests for shorts in automotive and truck electrical systems, motor field coils, radio and low-voltage circuits, ground circuits of all lamps, wiring, fuses, etc.
- Bulb in handle glows when circuit is complete (bulb included)
- Pointed 3-3/4" (95 mm) probe makes checking easier
- Deluxe 3-1/2" (89 mm) long handle with nylon top holds replaceable bulb
- 36" (915 mm) test lead with alligator clip
- Proudly built in U.S.A. with global components

Cat. No.	Overall Length	Weight
69127	43-1/4" (109.9 cm)	0.21 oz (6.0 g)
Replacement Part		
69130	Replacement Bulb for 69127	0.02 oz (0.6 g)

Circuit Breaker Finder Accessory Kit



69411

- For use with ET300 Digital Circuit Breaker Finder refer to page 198
- Light socket adapter for finding the corresponding circuit of a lighting fixture
- Alligator clip adapter enables use of Digital Circuit Breaker Finder on bare wires

Cat. No.	Weight
69411	0.13 lb (0.06 kg)



Specialty Testers

Digital Pocket Thermometers

NEW!

- User selectable Fahrenheit and Celsius temperature measurements
- Backlit display for easy viewing in low light
- Max/Min, Hold and Average functions
- Auto-power off after 15 minutes conserves battery life
- FDA GRAS compliant for food usage
- Lightweight, compact tool with pocket clip provides easy storage and quick access
- Cat. No. ET05 has a range of -40 to 482° F (-40 to 250° C);
Cat. No. ET10 has a range of -40 to 572° F (-40 to 300° C)

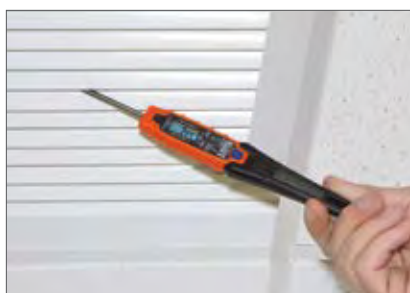


ET05



ET10

(Protective sheath positioned as handle)



- Cat. No. ET10 features a magnet inside base of probe to easily attach to vents for hand-free IAQ (indoor air quality) measurements

Cat. No.	Batteries	Overall Length	Overall Height	Overall Width	Weight
ET05 NEW!	2 x LR44	6-1/2" (165.1 mm)	15/16" (23.8 mm)	1-5/64" (27.4 mm)	1.4 oz (39 g)
ET10 NEW!	2 x LR44	6-1/2" (165.1 mm)	31/32" (24.6 mm)	1-1/4" (31.8 mm)	1.5 oz (42.5 g)

Not intended for use on people or animals

Light Meter

NEW!

- Easy-to-operate precision meter to monitor light levels and lighting retrofit projects
- Ideal for incandescent, fluorescent, metal halide, and daylight
- Measurements in foot candles (FC) and Lux
- Auto and manual range: 4000 FC; 40,000 Lux
- Features backlit LCD display with 40-segment bar graph
- Data Hold, Max/Min, and Auto Power Off
- Includes carrying pouch, instruction manual, and 9V battery



ET130

IES RECOMMENDED ILLUMINATION*			
Location		Lux	FC
Office	Conference Room	200-750	18-70
	Office area	500-750	47-70
	Lobbies, lounges	100-200	9-18
School	Auditorium, Gymnasium	100-300	9-28
	Classroom	200-750	18-70
	Library, Drafting, Laboratory	500-1500	47-140
Hospital	Rooms	100-300	9-28
	Emergency Room	500-1000	47-93
	Operating Room	1000-2000	93-186
Factory	Packing work	150-300	14-28
	Parts assembly	1500-3000	140-280
	Inspection work	750-1500	70-140
Store	Stairs, Corridor	150-200	14-18
	Stockroom	100-300	9-28
	Merchandising	750-1500	70-140

*The Lighting Handbook 10th Edition, Illuminating Engineering Society

Cat. No.	Batteries	Overall Length	Overall Height	Overall Width	Weight
ET130 NEW!	1 x 9V	8-3/32" (205.6 mm)	1-13/32" (35.7 mm)	2-3/32" (53.2 mm)	5.5 oz (156.0 g)

Specialty Testers

Carbon Monoxide Meter

NEW!

- Easy-to-use meter detects and measures concentration levels of carbon monoxide gas in ambient air
- User protection with short-term exposure limit (STEL) alarms: low level alarm (35 ppm) and high level alarm (200 ppm)
- Backlit display with CO measurement (0 to 1000 ppm) and temperature (°F and °C)
- Auto-power off after 20 minutes of no usage helps conserve battery life
- Includes carrying pouch, instruction manual, and 4 x AAA batteries



ET110

Cat. No.	Batteries	Overall Length	Overall Height	Overall Width	Weight
ET110 NEW!	4 x AAA	7-3/4" (196.9 mm)	1-29/64" (36.9 mm)	2-5/32" (54.8 mm)	5.1 oz (144.2 g)

Meter is not intended for use as personal protection equipment (PPE)

Combustible Gas Leak Detector

NEW!

- Select from two levels of sensitivity: High (50 to 1000 ppm) and Low (50 to 10,000 ppm)
- Measures methane, propane, butane, and other gases to detect for leaks
- Five red LEDs (visual) and 85db audible alerts that increase with gas concentration to detect the gas leak
- Automatic zero-point calibration at power-up
- 18 inch flexible gooseneck expands sensor's reach; clips onto device for storage
- Auto power-off after 10 minutes of non-usage conserves battery life
- Includes carrying pouch, instruction manual, and 4 x AAA batteries



ET120

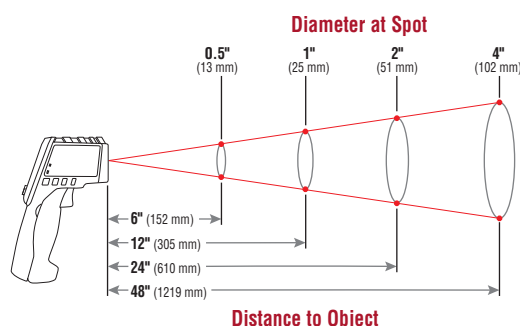
Cat. No.	Batteries	Overall Length	Overall Height	Overall Width	Weight
ET120 NEW!	4 x AAA	28-5/16" (719.1 mm)	2-3/4" (69.9 mm)	1-25/32" (45.2 mm)	13 oz (380 g)

Meter is not intended for use as personal protection equipment (PPE)

Specialty Testers

IR5 Dual Laser Infrared Thermometer

- Optical Resolution (Distance-to-spot) is 12:1
- Features include dual-laser targeting, auto-scan, max/min/avg/diff, high/low alarm, backlit display, auto power-off
- Drop protection to 6.6 ft. (2 m)
- Measurement Range: -22° to 752°F (-30° to 400°C)
- Uses one 9-volt battery, with battery life expectancy at 10 hours of continuous use with laser and backlight on
- Includes custom pouch and batteries
- Certified to IEC EN 61326-1:2006, EN608251:1994+A2:2001+A1:2002
- Adjustable emissivity
- Soft-touch, over-mold housing
- For ambient temperatures above freezing, the accuracy is +/- 4° F or +/- 2%; Accuracy below freezing is +/- 4° F plus 0.2 degrees per degree below 32° F



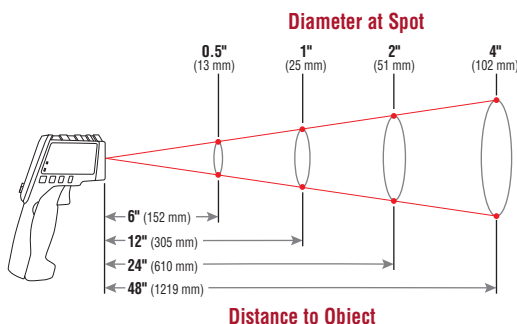
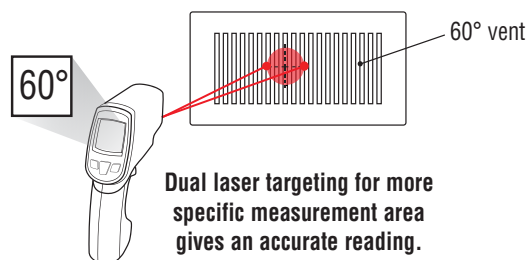
IR5



Cat. No.	Overall Length	Overall Height	Overall Width	Batteries	Weight
IR5	6-53/64" (173.4 mm)	4-17/32" (115.1 mm)	1-27/32" (46.9 mm)	1 x 9V	0.62 lb (0.28 kg)

12:1 Dual Laser Infrared Thermometer

- Dual lasers for specific measurement areas
- Tight (12:1) distance-to-spot ratio for accurate target area temperature measurements
- Features a wide temperature measurement range: -76° to 1022°F (-60° to 550°C)
- K-type thermocouple range: -83.2° to 2552°F (-64° to 1400°C)
- Auto-scan and Max / Min / Average / Differential calculations
- Includes a temperature °F/°C button
- Has both a backlit display and worklight
- 6.6 ft. (2 m) drop protection
- Accessories included: case, K-type thermocouple and batteries



IR2000A



Cat. No.	Overall Length	Overall Height	Overall Width	Batteries	Weight
IR2000A	6-3/4" (171.5 mm)	4-45/64" (119.4 mm)	1-7/8" (47.6 mm)	2 x AAA	0.56 lb (0.26 kg)

Specialty Testers

Video Borescope

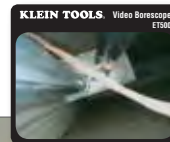
- Use the Video Borescope to view inaccessible areas
- It features video, audio, photo recording, file playback, a durable camera snake with an adjustable work light, and video output capabilities
- Other features include screen rotation, adjustable LED worklight, TV-out and SD card
- IP67: Dustproof and waterproof camera
- Multiple Applications: Electrical, HVAC, Plumbing, Automotive, Aircraft. Use to view inaccessible areas: inside a wall, down the drain, in furnace or vent
- Package contents: Video Borescope, 17 mm gooseneck camera, Rechargeable lithium ion battery, Mirror camera attachment, Hook camera attachment, Magnet camera attachment, USB data & power adapter/charger, RCA composite to 3.5 mm mini A/V cable, Quick start guide, Software/instruction manual CD-ROM, Carrying case



ET500

Multiple Applications!

- Electrical
- HVAC
- Plumbing
- Automotive
- Aircraft
- Use to view inaccessible areas:
 - Inside a wall
 - Down the drain
 - In furnace or vent



Cat. No.	Overall Length	Overall Height	Overall Width	Batteries	Weight
ET500	7" (177.8 mm)	1-3/4" (44.5 mm)	3-1/4" (82.6 mm)	2 x AAA Rechargeable	0.51 lb (0.23 kg)

Borescope

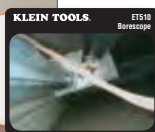
- Use the borescope to view inaccessible areas
- It features a durable camera snake, a high resolution screen, mirror image and an adjustable LED work light
- IP67: Dustproof and waterproof camera
- Multiple Applications: Electrical, HVAC, Plumbing, Automotive, Aircraft. Use to view inaccessible areas: inside a wall, down the drain, in furnace or vent
- Package contents: Borescope, 17 mm gooseneck camera, Rechargeable lithium ion battery, Mirror camera attachment, Hook camera attachment, Magnet camera attachment, USB data adapter/charger, USB power adapter/charger, Instruction manual



ET510

Multiple Applications!

- Electrical
- HVAC
- Plumbing
- Automotive
- Aircraft
- Use to view inaccessible areas:
 - Inside a wall
 - Down the drain
 - In furnace or vent



Cat. No.	Overall Length	Overall Height	Overall Width	Batteries	Weight
ET510	6-17/32" (165.9 mm)	1-35/64" (39.3 mm)	2-27/32" (72.2 mm)	Lithium-ion	0.51 lb (0.23 kg)



Test & Measurement Line Accessories

K-Type Temperature Pipe Clamp

NEW!

- Features a temperature sensor that clamps around pipes ranging from 1/4" to 1-3/8" diameter (up to 35 mm)
- A flexible 40" (1016 mm) lead
- Works with any clamp or multimeter that measures temperature
- Includes banana plug adapter



69140

Cat. No.	Overall Length	Overall Height	Overall Width	Temperature Range	Weight
69140 NEW!	5-1/4" (133.4 mm)	3/4" (19.1 mm)	3" (76.2 mm)	-4 to 212°F (-20 to 100°C)	3.13 lb (1.42 kg)

K-Type Thermocouple Probe

NEW!

- Pointed tip easily pierces fiberglass ductwork for HVAC measurements
- A coiled 5 ft (1.5 m) lead
- Wide measurement range: -58 to 1112°F
- Works with any clamp or multimeter that measures temperature
- Includes banana plug adapter

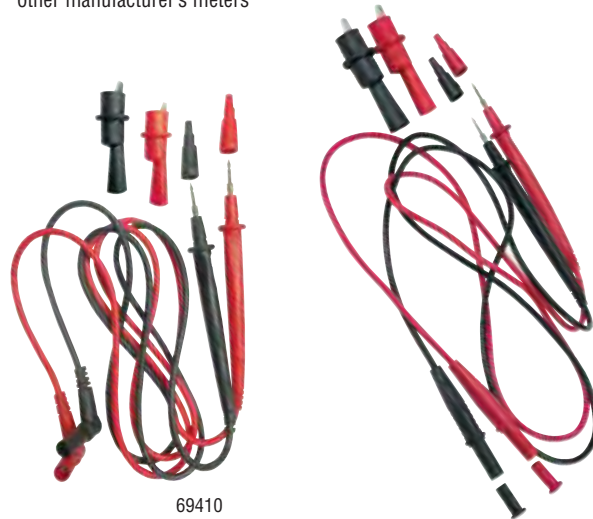


69144

Cat. No.	Overall Length	Overall Height	Overall Width	Temperature Range	Weight
69144 NEW!	12-1/2" (317.5 mm)	1/2" (12.7 mm)	1/2" (12.7 mm)	-58 to 1112°F (-50 to 600°C)	3.19 lb (1.45 kg)

Replacement Test Lead Sets

- Safety Rating: Category IV 600V and CAT III 1000V
- Screw-on alligator clips attach to wires and other conductors
- Intended for use as replacement test leads for meters that have standard, banana-type input jacks
- Leads are 41" (1,041 mm) long
- Cat. No. 69410 replacement test-lead set for MM300, MM400, MM600 and MM700
- Cat. No. 69418 replacement test-lead set for CL110, CL210, CL310, CL312, CL450, CL600, CL700, CL800, and CL900
- The leads perform accurately with Klein Tools' meters and other manufacturer's meters



69410

69418

Cat. No.	Weight
69410	0.20 lb (0.09 kg)
69418	0.21 lb (0.10 kg)

Replacement K-Type Thermocouples

NEW!

- This UL® listed replacement thermocouple (Cat. No. 69028) is for use with Klein Tools multimeters and clamp meters as shown on list below
- Temperature measurement range is 0 to 250° Celsius; Cat. No. 69142 has a temperature measurement range of 0 to 480° Celsius and includes banana plug adapter
- Leads compatible with and fit lead storage compartments on most Klein meters
- Cat. No. 69146 allows Type K temperature thermocouples to be used with a meter with banana plug ports



69146



69028



69142



69413



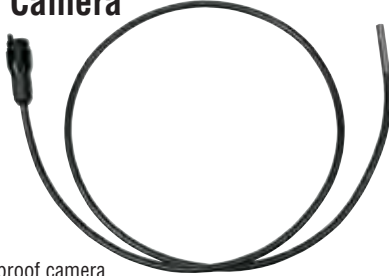
69414

Cat. No.	Type	For Use With	Weight
69028	K-Type Banana Thermocouple	CL200, CL210, CL310, CL312, CL330, CL700, CL800, CL1300, CL2300, MM200, MM400, MM600, MM700, MM1000, MM1300, MM2000, MM2300, MM6000	0.70 oz (19.8 g)
69413	K-Type Thermocouple	CL1100, CL2100, IR2000, IR2000A, IR3000, CL450	0.21 oz (6.0 g)
69414	DTL K-Type Thermocouple	DTL302, DTL304, CL450	0.21 oz (6.0 g)
69142 NEW!	K-Type Thermocouple, High Temperature	Any Clamp or Digital Multimeter that Measures Temperature	0.4 oz (11 g)
69146 NEW!	K-Type Banana Plug Adapter	Any Clamp or Digital Multimeter that Measures Temperature	0.4 oz (11 g)



Test & Measurement Line Accessories

6 mm Borescope Camera



69450

- IP67: Dustproof and waterproof camera
- Bright LED worklight
- Gooseneck design for greater control and positioning
- Smaller footprint when penetrating walls and panels

Cat. No.	Overall Length	Overall Width	Weight
69450	1 m (3.28')	6 mm (0.23")	0.22 lb (0.10 kg)
69451	2 m (6' 7")	6 mm (0.23")	0.34 lb (0.16 kg)

17 mm Borescope Camera



69454

- IP67: Dustproof and waterproof camera
- Bright LED worklight
- Gooseneck design for greater control and positioning

Cat. No.	Overall Length	Overall Width	Weight
69454	1 m (3.28')	17 mm (0.66")	0.59 lb (0.27 kg)

1 Meter Borescope Camera Extension



69455

- Extends the reach of 17 mm and 6 mm borescope cameras
- Up to two extensions can be used with 17 mm camera without loss of video quality, to 9.9 ft. (3 m)
- Maximum of four extensions plus camera

Cat. No.	Overall Length	Overall Width	Weight
69455	1 m (3.28')	17 mm (0.67")	0.58 lb (0.26 kg)

Borescope Attachment Tools

- Compatible with 17 mm diameter camera



69457

Cat. No.	Included	Weight
69457	1-5/8" (41.3 mm) Mirror Camera Attachment, 3" (76.2 mm) Hook Camera Attachment, 3-1/4" (82.6 mm) Magnet Camera Attachment	0.40 oz (11.3 g)

Line Splitter 10x

- Allows the measuring of current draw up to 15A without splitting the load's power cord
- For use with all Klein Tools clamp meters and other manufacture clamp meters
- Can be used to perform voltage checks with standard multimeter probes
- Provides 10X measurement mode
- For North American-style outlets only

⚠️ WARNINGS:

- Do NOT use with loads greater than 15A.
- Risk of electric shock and burn. Contact with live circuits could result in death or serious injury.
- Do not use if line splitter appears damaged. If in doubt, replace line splitter.
- Do NOT use line splitter if wet. For indoors use only.

Cat. No.	Overall Length	Overall Height	Overall Width	Weight
69409	4.67" (118.61 mm)	4-43/64" (118.7 mm)	2-9/32" (57.9 mm)	0.24 lb (0.11 kg)



69409



Test & Measurement Line Accessories

Magnetic Hangers

- Durable nylon weave resists wear and tear
- Constructed with powerful rare earth magnets
- Has a secure loop & hook
- Hanger allows the user to safely work hands-free
- Cat. No. 69190 clips securely into back of rubber boot

Cat. No.	Application	For Use With	Weight
69417	Electrician's Multimeters and Select Clamps	MM300, MM400, MM600, MM700, CL450, CL600, CL700, CL800, CL900	1.1 oz (31 g)
69190	Electrician's Previous Generation Multimeters	MM1000, MM1300, MM2000, MM2300	1.1 oz (31 g)



69190



69417

Carrying Case

- Constructed of black 600 Denier Nylon
- Has a heavy-duty PVC zipper and zinc alloy zipper tag
- The case has exceptional resistance to abrasions, punctures and tears
- Easily fits the following Klein Tools test and measurement meters: MM300, MM400, MM600, MM700, CL110, CL210, CL310, CL312, CL330, CL600, CL700 and CL800
- Convenient storage for other test and measurement products

Cat. No.	Number of Pockets	Overall Length	Overall Width	Weight
69401	1	9-1/4" (235.0 mm)	4" (101.6 mm)	0.20 lb (0.09 kg)



69401

Cases

TRADESMAN PRO™

Tradesman Pro™ Carrying Cases

- Two layers of padding protect even delicate instruments
- Heavy-duty zipper and rugged PVC coated polyester for durability
- Pockets for quick access and organization
- Cat. No. 69406 has loop with snap closure to attach to belts, bags and backpacks
- Cat. Nos. 69407 and 69408 have sturdy handle with box stitching for secure transportation and convenient hanging
- Cat. Nos. 69406 and 69407 recommended for meters, testers, infrared guns, and small tools
- Cat. No. 69408 recommended for meters, testers, infrared guns, tools, and borescopes

Cat. No.	Number of Pockets	Overall Length	Overall Height	Overall Width	Weight
69406	1	9-1/4" (235.0 mm)	2-1/4" (57.2 mm)	4-1/2" (114.3 mm)	0.38 lb (0.17 kg)
69407	2	10-1/4" (260.4 mm)	2-1/4" (57.2 mm)	6" (152.4 mm)	0.53 lb (0.24 kg)
69408	2	10-1/4" (260.4 mm)	2-1/4" (57.2 mm)	7" (177.8 mm)	0.66 lb (0.30 kg)



69406

69407

69408

Tradesman Pro™ Hard Cases

- Hard shell protects tools, meters, small parts and tech devices
- Soft interior lining
- Durable zipper closure

Cat. No.	Number of Pockets	Overall Length	Overall Height	Overall Width	Weight
5184	1	8-3/4" (222.3 mm)	2-1/4" (57.2 mm)	6-1/2" (165.1 mm)	0.63 lb (0.29 kg)
5189	1	10-1/4" (260.4 mm)	2-1/4" (57.2 mm)	5-1/2" (139.7 mm)	0.63 lb (0.29 kg)



5189



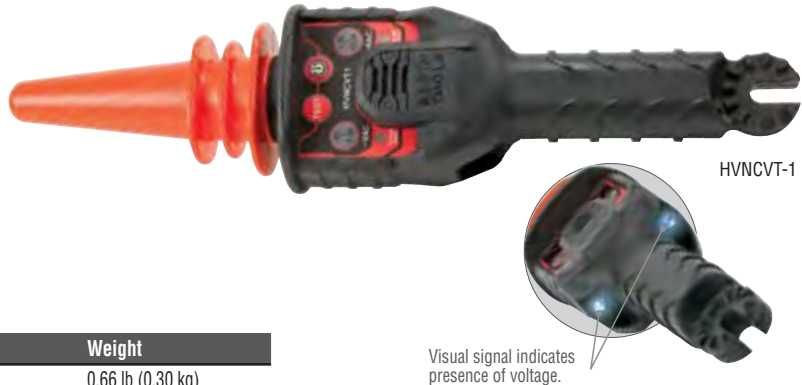
5184

High Voltage Testers

Detect a wide range of AC voltage in overhead conductors and cables

Dual-Range High Voltage Non-Contact Tester

- Use to check for the presence of voltage in overhead conductors or to find faults in cables
- LOW range for 50V AC to 1.5kV AC
- HIGH range for 1.5kV AC to 132kV AC
- Includes durable carrying case



Cat. No.	Overall Length	Voltage	Weight
HVNCVT-1	13" (330.2 mm)	Low: 50V AC - 1.5kV AC High: 1.5kV AC - 132kV AC	0.66 lb (0.30 kg)

Broad-Range Non-Contact Tester

- Use to check for the presence of voltage in overhead conductors or to find faults in cables
- 7 sensitivity ranges up to 230kV AC (240V, 4.2kV, 15kV, 25kV, 35kV, 69kV, 115kV, 230kV)
- Includes durable carrying case and universal/shotgun adapter



Cat. No.	Overall Length	Voltage	Weight
HVNCVT-2	10-25/64" (260.4 mm)	up to 230kV AC	1.4 lb (0.6 kg)