TEST & MEASUREMENT



Klein Tools has been manufacturing professional hand tools for almost 160 years. The company remains committed to providing the best hand tools in the industry while supporting electricians and professional tradespeople around the world with quality and reliability they can trust.

Tested Tough! Our products stand up to the demands of the professionals who use them every day, delivering all the performance, durability and precision needed to get the job done right, the first time, every time! Klein's new meters and electrical testers are packed with capabilities and functionality:

- Designed **TOUGH** to withstand jobsite drops and rough conditions
- Easy-to-use dials and buttons
- Large, bright, evenly backlit displays
- Molded-in test lead holders
- · Comfortable, compact over-molded housing that's easy to hold

The new Test & Measurement line offers a variety of additional products including 10x Line Splitters, Outlet Testers, Non-Contact Voltage Testers, and optional accessories (such as carrying pouches, magnetic hangers, replacement leads), completing a product line that will exceed expectations on the most demanding jobsites for years to come.

Trusted Safe! These new digital clamp and multimeters boast capabilities that are specifically aligned with customers' expanding jobsite needs and expectations. These products were designed to meet CAT III or CAT IV requirements, as defined by IEC 61010 (3rd edition) standards. To the professional electrician and electrical technician, Klein knows that nothing is more important than safety. And that's why Klein has been **the #1 choice of electricians since 1857.**



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CE US

Intertek

True RMS Technology

Measurement

Clamp trigger

The **CL600** is an auto-ranging True Root-Mean-Squared (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 True Root-Mean-Squared (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 True Root-Mean-Squared (TRMS) digital clamp meter that measures AC/DC current via the clamp, 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 CL600, CL700 and CL800 each include a nylon carrying pouch, test leads and batteries. The CL700 and CL800 also include a thermocouple with adapter.







Function selector switch Function buttons

Test lead input jacks

LCD

display

Non-contact

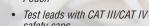
sensor

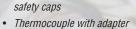
voltage testing











KLEIN TOOLS

Safety Rating







		Tour State	TOTAL TOTAL	TOUGH.
MEAS	UREMENT	CL600	CL700	CL800
$\left \overline{\widetilde{\mathbf{v}}} \right $	AC/DC Voltage	1000V	1000V	1000V
~A	AC Current	600A	600A	600A
Ā	DC Current	_	_	600A
Ω	Resistance	60ΜΩ	60ΜΩ	60ΜΩ
mV	DC Millivolts	•	•	•
TRMS	True RMS	•	•	•
•)))	Audible Continuity	•	•	•
	Backlight	•	•	•
°F°C	Temperature	_	-14° – 1000°F (-26° – 538°C)	-14° – 1000°F (-26° – 538°C)
LOW Z	Low Impedance	_	•	•
NCV	Non-Contact Voltage Testing	•	•	•
AUTO	Auto-Ranging	•	•	•
RANGE	Range Hold	•	•	•
HOLD	Data Hold	•	•	•
+	Diode Test	•	•	•
46	Capacitance Test	_	6000 μF	6000 μF
Hz%	Frequency/Duty Cycle	_	1 Hz - 500 kHz	1 Hz - 500 kHz
MAX/MIN	Max/Min Value	•	•	•
Apo	Auto Power-Off	•	•	•
	Worklight	_	_	•
8888 ECD	LCD Display Count	6000	6000	6000
DURA	BILITY			
=/ \	Ingress Protection	IP40	IP40	IP40
	Drop Protection	6.6 ft. (2 m)	6.6 ft. (2 m)	6.6 ft. (2 m)

CAT IV

600V

Specifications subject to change.

CAT IV

600V

CAT IV

600V

CLAMP METERS





Clamp trigger

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 CL310 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.

The CL110, CL210 and CL310 clamp meters include a nylon carrying pouch, test leads, and batteries. The CL210 and CL310 also include a thermocouple.

Also available: CL110KIT Electrical Maintenance & Test Kit. Includes CL110 Clamp Meter, RT210 GFCI Receptacle Tester and 69409 Line Splitter-10x, nylon carrying pouch, test leads and batteries.



KLEIN. TOOLS CL210

> Function selector switch

LCD display

Function buttons

Test lead input jacks





KLEIN

Pouch

 Test leads with CAT III/CAT IV safety caps

Thermocouple









EASUREMENT	CL110	CL210	CL310
AC/DC Voltage	600V	600V	600V
AC Current	400A	400A	400A
Resistance	20ΜΩ	20ΜΩ	40ΜΩ
AC Millivolts	•	•	_
DC Millivolts	•	•	•
RMS True RMS	_	_	•
•)) Audible Continuity	•	•	•
Backlight	•	•	•
F°C Temperature	_	-40° – 1832°F (-40° – 1000°C)	-40° – 1832°F (-40° – 1000°C)
UTO Auto-Ranging	•	•	•
ANGE Range Hold	•	•	•
OLD Data Hold	•	•	•
Diode Test	_	_	•
Capacitance Test	_	_	4mF
Frequency/Duty Cycle	_	_	10Hz – 1MHz
AXMIN Max/Min Value	MAX 🗡 MIN ×	MAX 🗸	MAX 🗡
Apo Auto Power-Off	•	•	•
LCD Display Count	2000	2000	4000
URABILITY			
Drop Protection	3.3 ft. (1 m)	3.3 ft. (1 m)	3.3 ft. (1 m)
★ Safety Rating	CAT III 600V	CAT III 600V	CAT III 600V
		Spe	cifications subject to ci

DIGITAL

CLAMP METERS

FUNCTIONS & FEATURES

DIGITAL







4		
TOUGH	TOUGH	TOTIGH
Inde land	MELL	MELL

LAIMP MEIEN		433		MIE.	IEEE WIE	
FEATURES	CL110	CL210	CL310	CL600	CL700	CL800
Durability	CAT	CAT	CAT	CAT LATE	GAT LETT	CAT UZEN
Drop Protection	3.3 ft. (1 m)	3.3 ft. (1 m)	3.3 ft. (1 m)	6.6 ft. (2 m)	6.6 ft. (2 m)	6.6 ft. (2 m)
Ingress Protection	_	_	_	IP40	IP40	IP40
<u>∱</u> Safety	CAT III 600V	CAT III 600V	CAT III 600V	CAT IV 600V	CAT IV 600V	CAT IV 600V
X AC Voltage (Volts)	600V	600V	600V	1000V	1000V	1000V
DC Voltage (Volts)	600V	600V	600V	1000V	1000V	1000V
AC Current (Amps)	400A	400A	400A	600A	600A	600A
DC Current (Amps)	_	_	_	_	_	600A
Ohms (Resistance)	20ΜΩ	20ΜΩ	40ΜΩ	60ΜΩ	60ΜΩ	60ΜΩ
AC Millivolts	•	•	_	_	_	_
DC Millivolts	•	•	•	•	•	•
True RMS	_	_	•	•	•	•
Audible Continuity	•	•	•	•	•	•
Backlight	•	•	•	•	•	•
Temperature	_	-40° – 1832°F (-40° – 1000°C)	-40° – 1832°F (-40° – 1000°C)	_	-14° – 1000°F (-26° – 538°C)	-14° – 1000°F (-26° – 538°C)
Low Impedance	_	_	_	_	•	•
Non-Contact Voltage Testing	_	_	_	•	•	•
UTO Auto Ranging	•	•	•	•	•	•
NGE Range Hold	•	•	•	•	•	•
OLD Data Hold	•	•	•	•	•	•
→ Diode Test	_	_	•	•	•	•
Capacitance Test	_	_	4000 μF	_	6000 μF	6000 μF
z% Frequency / Duty Cycle	-	_	10Hz – 1MHz	-	1Hz – 500 KHz	1Hz – 500 KHz
XMIN Max/Min	MAX only	MAX only	•	•	•	•
Magnetic Mount	_	_	_	Available As Accessory	Available As Accessory	Available As Accessory
Worklight	_	_	_	_	_	•
po Auto-Power Off	•	•	•	•	•	•
LCD Display Count	2000			6000	6000	6000

DIGITAL MULTIMETERS









MULTIMETERS	575.	ON AND	METERS	METER
FEATURES	MM300	MM400	MM600	MM700
Durability	CAT Lim	CAT	CAT WETT	GAT Wan
Drop Protection	3.3 ft. (1 m)	3.3 ft. (1 m)	6.6 ft. (2 m)	6.6 ft. (2 m)
Ingress Protection	_	_	IP42	IP42
<u></u> Safety	CAT III 600V	CAT III 600V	CAT IV 600V	CAT IV 600V
AC Voltage (Volts)	600V	600V	1000V	1000V
DC Voltage (Volts)	600V	600V	1000V	1000V
AC Current (Amps)	_	10A	10A	10A
DC Current (Amps)	10A	10A	10A	10A
Ω Ohms (Resistance)	2ΜΩ	40ΜΩ	40ΜΩ	40ΜΩ
DC Millivolts	•	•	•	•
AC Milliamps	_	•	•	•
mĀ DC Milliamps	•	•	•	•
AC Microamps	_	•	•	•
DC Microamps	•	•	•	•
TRMS True RMS	_	_	_	•
Audible Continuity	•	•	•	•
Backlight	_	•	•	•
°F°C Temperature	_	0° - 1000°F (-18° - 538°C)	0° – 1000°F (-18° – 538°C)	0° - 1500°F (-18° - 816°C)
Low Impedance	_	_	-	•
AUTO Auto Ranging	_	•	•	•
RANGE Range Hold	-	•	•	•
HOLD Data Hold	•	•	•	•
▶ Diode Test	•	•	•	•
	_	200 μF	1000 μF	4000 μF
Hz:/. Frequency / Duty Cycle	_	1Hz – 50 KHz	1Hz – 500 KHz	1Hz – 500 KHz
MAXMN Max / Min	_	•	•	•
LEAd Lead Warning	_	_	•	•
IIIII Bar Graph	_	_	_	•
Magnetic Mount	Available As Accessory	Available As Accessory	Available As Accessory	Available As Accessory
Apo Auto-Power Off	_	•	•	•
Battery Test	•	_	_	_
LCD Display Count	2000	4000	4000	4000

FUNCTIONS & FEATURES







LCD -

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, and 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.

KLEIN TOOLS. MM700

The MM600 and MM700 include a nylon carrying pouch, test leads, alligator clips, batteries and thermocouple with adapter.







MM700 Shown

INCLUDED:

Pouch

KLEIN TOOLS

- Test leads with CAT III/CAT IV safety caps
- Alligator clips
- · Thermocouple with adapter







MM700	(TOUGH)
1000V	

IEAS	SUREMENT	MM600	MM700
$\overline{\widetilde{\mathbf{v}}}$	AC/DC Voltage	1000V	1000V
$\overline{\widetilde{A}}$	AC/DC Current	10A	10A
Ω	Resistance	40ΜΩ	40ΜΩ
mV	DC Millivolts	•	•
$\overline{\widetilde{mA}}$	AC/DC Milliamps	•	•
$\overline{\widetilde{\mu}}$	AC/DC Microamps	•	•
TRMS	True RMS	_	•
•)))	Audible Continuity	•	•
	Backlight	•	•
°F℃	Temperature	0° - 1000°F (-18° - 538°C)	0° – 1500°F (-18° – 816°C)
LOW Z	Low Impedence (Low Z)	_	•
AUTO	Auto-Ranging	•	•
RANGE	Range Hold	•	•
HOLD	Data Hold	•	•
H	Diode Test	•	•
16	Capacitance Test	1000 μF	4000 μF
Hz%	Frequency/Duty Cycle	1Hz – 500 KHz	1Hz – 500 KHz
AX/MIN	Max/Min Value	•	•
LERd	Lead Warning	•	•
ıml	Bar Graph	_	•
Apo	Auto Power-Off	•	•
8888 ECD	LCD Display Count	4000	4000
	DURABILITY		
:	Ingress Protection	IP42	IP42
	Drop Protection	6.6 ft. (2 m)	6.6 ft. (2 m)
\triangle	Safety Rating	CAT IV 600V	CAT IV 600V

TOUGH METER MULTIMETERS



CE c Ustre Dus 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.

The MM300 and MM400 multimeters include test leads and batteries. The MM400 also includes a thermocouple with adapter.



Magnetic hanger 69417 (optional)



- Test leads with CAT III/CAT IV safety caps
- · Thermocouple with adapter
- Batteries







MEAS	SUREMENT	MM300	MM400
$\overline{\widetilde{\mathbf{v}}}$	AC/DC Voltage	600V	600V
Ã	AC Current	_	10A
Ā	DC Current	10A	10A
Ω	Resistance	2ΜΩ	40ΜΩ
mV	DC Millivolts	•	•
mÃ	AC Milliamps	_	•
mĀ	DC Milliamps	•	•
μÃ	AC Microamps	_	•
μĀ	DC Microamps	•	•
•)))	Audible Continuity	•	•
	Backlight	_	•
°F°C	Temperature	_	0° – 1000°F (-18° – 538°C)
AUTO	Auto-Ranging	_	•
RANGE	Range Hold	_	•
HOLD	Data Hold	•	•
> +	Diode Test	•	•
46	Capacitance Test	_	200 μF
Hz %	Frequency/Duty Cycle	_	1 Hz – 50 kHz
MAX/MIN	Max/Min Value	_	•
Apo	Auto Power-Off	_	•
TEST	Battery Test	•	_
8888 EEB	LCD Display Count	2000	4000
DUR/	ABILITY		
	Drop Protection	3.3 ft. (1 m)	3.3 ft. (1 m)
\triangle	Safety Rating	CAT III 600V	CAT III 600V

Specifications subject to change.

Lead storage

DIGITAL MULTIMETERS

NCVT-2

NCVT-3

Non-Contact Voltage Testers



KLEIN TOOLS

CUL US CE

CATIL DE CE



The NCVT-1 detects standard voltage (48-1000V AC) in cables, cords, circuit breakers, lighting fixtures, switches, outlets and wires.



and is perfect for use in security, entertainment, communications, environmental control and irrigation systems.



illuminates dark or dimly-lit work areas. Rated IP67: dustproof/waterproof, it can withstand a 6.6 ft. (2m) drop.

Accessories

Replacement Test Leads

Compatible with all Klein meters and most other brands. Includes screw-on alligator clips. Safety rating: CAT IV 600V, CAT III 1000V.



Line Splitter 10x 69409

Allows the measuring of current draw up to 15A without having to split the load's power cord. For use with all Klein clamp meters.



Test Kits

Magnetic Hanger 69417

For use with Klein Tools MM300, MM400, MM600 and MM700 multimeters and CL600, CL700 and CL800 clamp meters.

Magnetic Hanger 69190

For use with previousgeneration Klein Tools multimeters MM1000. MM1300, MM2000 and MM2300.



Carrying Case 69401

Practical pouch for use with Klein meters and other small tools. Constructed of 600 denier polyester, with heavy duty zipper.

4 x 9-1/4 x 2-1/2" (102 x 235 x 57 mm)

Receptacle Testers

KLEIN TOOLS.

Designed to detect the most common wiring problems! The RT110 instantly diagnoses common wiring faults in standard grounded outlets, while the RT210 works with both standard and GFCI (ground fault circuit interrupter) outlets.



Conditions indicated: Wiring correct, open

ground, reverse polarity, open hot, open neutral,

hot/ground reversed.





Electrical Test Kit 69149 Easy-to-use kit to diagnose electrical problems quickly.

Kit includes: MM300 Digital Multimeter, NCVT-1 Non-Contact Voltage Tester, RT105 Receptacle Tester, test leads and batteries.









Electrical Maintenance & Test Kit CL110KIT

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.

Kit includes: CL110 Digital Clamp Meter, 69409 10x Line Splitter, RT210 GFCI Receptacle Tester, test leads, batteries and carrying case.











ACCESSORIES

20

EST T

Tested Tough. Trusted Safe.



See our complete line of Test & Measurement products at www.kleintools.com







