

# IDEAL TEST & MEASUREMENT CATALOG



For over 90 years, IDEAL INDUSTRIES, INC. has been enhancing the productivity and safety of electrician's who test, measure, or troubleshoot electrical systems. In 2021 we released a new line of testers with the professional electrician in mind. See our new additions in this catalog.

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Scan this QR code with your smartphone to learn more about the new line.

## SURETRACETM CIRCUIT TRACER

Your IDEAL troubleshooting solution. Designed **to find** everything, while saving you time and money. Scan this QR code with your smartphone to see a video and learn more about the testers.



### **KIT OPTIONS AND PARTS**

KIT OPTIONS	61-959  Receiver with Super-Bright OLED Rotating Display (90° increments) and inductive clamp and battery pack	61-957 Receiver with Super-Bright OLED Rotating Display (90° increments)	61-955 Receiver with Rotating Red LED Display (180° increments)
INDIVIDUAL COMPONENTS	61-959	61-957	61-955
RC-959 Receiver with Super-Bright OLED Display	<b>✓</b>	<b>✓</b>	_
RC-955 Receiver with Red LED Display	_	—	~
TR-955 Transmitter Rated for Use on Circuits from 0 to 600V AC/DC	<b>✓</b>	~	~
IC-958   BP-958 Inductive Clamp and Battery Pack For use on 0 to 120V circuits carrying less than 5 Amps.	<b>✓</b>	_	_
TL-956 Test Lead Set	<b>✓</b>		
CR-959 Cradle for RC-959 and RC-955 Receivers	Sold Separately	Sold Separately	Sold Separately

### **CIRCUIT TRACER RECEIVERS FEATURES**



0-600V AC or DC Lead Set included.

#### CIRCUIT TRACER TRANSMITTER FEATURES



### CertainCircuit™

After the correct breaker has been identified and tripped, the transmitter senses the loss of power and sends a different signal back to the receiver at the panel to give the user confidence that the right circuit has been de-energized.



**Energized** 



**De-energized** 

#### **Traces de-energized** circuits



**Inductive Clamp** for when direct contact with alligator clips is not possible .



**TR-955** 



**Inductive Clamp & Battery Pack** (For use on circuits carrying up to 120V AC w/less than 5 Amps)

IC-958 | BP-958



(For use on RC-955 & RC-959 Receivers) **CR-959** 



CUL) US LISTED C E CAT

### **Tracer Test Lead Set**

#### **TL-956** (includes the following)

- 1. 3 Ft. Lead Adapter for Transmitter (set of 2)
- 2. 25 ft. Lead Adapter for Transmitter
- 3. Alligator Clips (set of 2)
- 4. Blade Prongs
- 5. Prong for Lead Adapters
- 6. Outlet Plug Adapter for Transmitter

### **CIRCUIT BREAKER**

**FINDERS** 

Scan this QR code with your smartphone to see a video and learn more about the testers.



### **FEATURES**









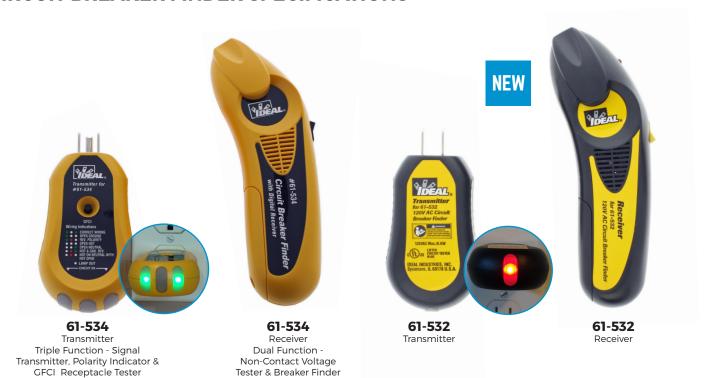


**Lead Adapter Kit** Provides adapters for use in lighting fixtures.



**TL-532A** Test Lead & Adapter Kit

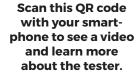
### **CIRCUIT BREAKER FINDER SPECIFICATIONS**



CIRCUIT BREAKER FINDER SELECTION GUIDE	Al SS Complete Forder of the Complete Forder	
TRANSMITTER FEATURES	61-534	61-532
CAT Rating (Safety)	CAT II 300V	CAT II 300V
Listing	UL 1436	UL 1436
Line Voltage	Line Powered (120V AC only)	Line Powered (120V AC only)
Supply Frequency	47-63Hz	47-63Hz
Weight	50g (approx.)	50g (approx.)
Pulse Amplitude	18A (approx.) @ 120V	18A (approx.) @ 120V
Pulse Rate	4mS every 17ms (@ 60Hz)	4mS every 17ms (@ 60Hz)
Power Consumption	200mW max. @ 120V AC	200mW max. @ 120V
Operating Temperature	32° - 122°F (O to 50°C)	32° - 122°F (0 to 50°C)
GFCI	<b>✓</b>	_
Polarity Indication	<b>✓</b>	_
RECEIVER FEATURES		
Visual and Audible Indicators	<b>✓</b>	<b>✓</b>
Low Battery Indication	<b>✓</b>	<b>✓</b>
Auto Power Off (after 10 mins. of no activity)	<b>✓</b>	<b>✓</b>
Battery Type (Included)	9V	9V
Weight	0.2 lbs. (w/o battery)	0.2 lbs. (w/o battery)
Warranty	2-Year*	2-Year*
ACCESSORIES		
Light Socket and 3-prong to 2-prong Adapters, Alligator Clips	TL-532A	TL-532A

## SURETEST® CIRCUIT ANALYZER

#### **FEATURES**







**61-164**Circuit Analyzer







True RMS Line Voltage



**Displays Voltage Drop** at 12, 15 & 20 Amps



**Displays Impedance** of hot, neutral & ground



**Displays H N G** polarity



**Detects and Displays** false or "bootleg" ground



**Displays** neutral to ground voltage



**Trips GFCI** at 6mA or 30mA





Estimated Load on Line in Amps

### **CIRCUIT ANALYZER SPECIFICATIONS**

#### **SURETEST® CIRCUIT ANALYZER SPECIFICATIONS**







TRANSMITTER FEATURES  CAT Rating (Safety)  CAT III 300V  —  Listing  CULus  —  AC Voltage (Note: The 61-164 is protected to 265V AC but should be unplugged immediately if plugged into a mis-wired outlet. It is intended for use on 120V AC circuits only.) Do not press any buttons.  Frequency  Frequency  —  45.0 – 65.0 Hz  1.0%  Neutral Ground Voltage  —  0.00 - 3.00 Ω  5.0%  Voltage Drop 12A, 15A, 20A Load Tests  —  6.0 - 9.0 mA  2.0%				
TRANSMITTER FEATURES  CAT Rating (Safety)  CAT III 300V  —  Listing  CULus  —  AC Voltage (Note: The 61-164 is protected to 265V AC but should be unplugged immediately if plugged into a mis-wired outlet. It is intended for use on 120V AC circuits only.) Do not press any buttons.  Frequency  Frequency  —  45.0 – 65.0 Hz  1.0%  Neutral Ground Voltage  —  0.00 - 3.00 Ω  5.0%  Voltage Drop 12A, 15A, 20A Load Tests  —  6.0 - 9.0 mA  2.0%		61-164		
CAT Rating (Safety)  CAT III 300V  Listing  CULus  AC Voltage (Note: The 61-164 is protected to 265V AC but should be unplugged immediately if plugged into a mis-wired outlet. It is intended for use on 120V AC circuits only.) Do not press any buttons.  Frequency  Frequency  - 45.0 - 65.0 Hz  1.0%  Neutral Ground Voltage  - 0.00 - 3.00 Ω  Neutral Ground Voltage  - 0.1% - 50.0%  5.0%  GECL mA Trip Level & Time to Trip in Milliseconds		Description		Accuracy
Listing cULus —  AC Voltage (Note: The 61-164 is protected to 265V AC but should be unplugged immediately if plugged into a mis-wired outlet. It is intended for use on 120V AC circuits only.) Do not press any buttons.  Frequency — 45.0 - 65.0 Hz 1.0%  Impedance — 0.00 - 3.00 Ω 5.0%  Neutral Ground Voltage — 0.0 - 24.0V AC 2.0%  % Voltage Drop 12A, 15A, 20A Load Tests — 0.1% - 50.0% 5.0%	TRANSMITTER FEATURES			
AC Voltage (Note: The 61-164 is protected to 265V AC but should be unplugged immediately if plugged into a mis-wired outlet. It is intended for use on 120V AC circuits only.) Do not press any buttons.  Frequency  - 45.0 - 65.0 Hz  1.0%  Impedance  - 0.00 - 3.00 Ω  Neutral Ground Voltage  - 0.0 - 24.0V AC  2.0%  GECL MA Trip Level & Time to Trip in Milliseconds	CAT Rating (Safety)	CAT III 300V	_	
AC Voltage (Note: The 61-164 is protected to 265V AC but should be unplugged immediately if plugged into a mis-wired outlet. It is intended for use on 120V AC circuits only.) Do not press any buttons.       — (Unplug if 240V AC is displayed and correct wiring.)         Frequency       — 45.0 - 65.0 Hz       1.0%         Impedance       — 0.00 - 3.00 Ω       5.0%         Neutral Ground Voltage       — 0.0 - 24.0V AC       2.0%         % Voltage Drop 12A, 15A, 20A Load Tests       — 0.1% - 50.0%       5.0%	Listing	cULus	_	
Impedance       —       0.00 - 3.00 Ω       5.0%         Neutral Ground Voltage       —       0.0 - 24.0V AC       2.0%         % Voltage Drop 12A, 15A, 20A Load Tests       —       0.1% - 50.0%       5.0%         GECL MA Trip Level & Time to Trip in Milliseconds       —       6.0 - 9.0 mA       2.0%	be unplugged immediately if plugged into a mis-wired outlet. It is	-	(Unplug if 240V AC is displayed and	1.0%
Neutral Ground Voltage — 0.0 - 24.0V AC 2.0%  % Voltage Drop 12A, 15A, 20A Load Tests — 0.1% - 50.0% 5.0%  GECL MA Trip Level & Time to Trip in Milliseconds — 6.0 - 9.0 mA 2.0%	Frequency	_	45.0 - 65.0 Hz	1.0%
% Voltage Drop 12A, 15A, 20A Load Tests — 0.1% - 50.0% 5.0%  GECL mA Trip Level & Time to Trip in Milliseconds — 6.0 - 9.0 mA 2.0%	Impedance	_	0.00 - 3.00 Ω	5.0%
GECLIMA Trip Level & Time to Trip in Milliseconds 6.0 - 9.0 mA 20%	Neutral Ground Voltage	_	0.0 - 24.0V AC	2.0%
IGECT MA Trin Laval X. Time to Trin in Milliseconds	% Voltage Drop 12A, 15A, 20A Load Tests	_	0.1% - 50.0%	5.0%
0.0 - 6500 mS	GFCI mA Trip Level & Time to Trip in Milliseconds	-	6.0 - 9.0 mA 0.0 - 6500 mS	2.0%
Warranty 2-Year* —	Warranty	2-Year*	_	
ACCESSORIES Part No.	ACCESSORIES		Part No.	
Ground Continuity Adapter (For checking grounding of cabinets, etc.) 61-175	Ground Continuity Adapter (For checking grounding of cabinets, etc.)	61-175		
Isolated Ground Adapter (For determining whether receptacle has an isolated ground.)  61-176		61-176		
Alligator Clip Adapter (For connection to circuits other than outlets.) 61-183	Alligator Clip Adapter (For connection to circuits other than outlets.)	61-183		
1' Extension Cord (included) 61-182	1' Extension Cord (included)	61-182		
Nylon Carrying Case (included) 61-179	Nylon Carrying Case (included)	61-179		

IMPORTANT: This circuit analyzer is intended for use by qualified electricians. Follow the NFPA 70E Standard for Electrical Safety in the Workplace when using this tester. Always consult the instruction manual provided with the tester for operational limitations and procedures associated with a specific tester.



**61-183**Alligator Clip Adapter for 61-164
Circuit Analyzer



**61-175**Ground Continuity
Adapter for 61-164
Circuit Analyzer



**61-176**Isolated Ground
Adapter for 61-164
Circuit Analyzer



**61-182**1' Extension Cord for 61-164
Circuit Analyzer

### **CLAMP/FORK METER VS. MULTIMETER**



**Safety** - A fork meter allows you to measure AC or DC current (depending on the model) by positioning the fork around a conductor, which is much safer than making direct contact with a live circuit.

**Productivity** - During a measurement, it is not necessary to shut off the circuit carrying current, which improves productivity.

Limited to 200A AC/DC Measurement

No Fuse Protection required



**Safety** - A clamp meter allows you to measure AC or DC current (depending on the model) by positioning the clamp jaw around a conductor, which is much safer than making direct contact with a live circuit.

**Productivity** - During a measurement, it is not necessary to shut off the circuit carrying current, which improves productivity. This allows isolation of a conductor being tested in a bundle of conductors.

Limited to 2000A AC/DC Measurement (Hard Clamp)

No Fuse Protection required

Multimeters measure current differently than a fork or clamp meter. To measures current with a multimeter:

• You must insert the multimeter into the circuit to get the current to flow THROUGH the meter and are making direct contact with the live circuit.

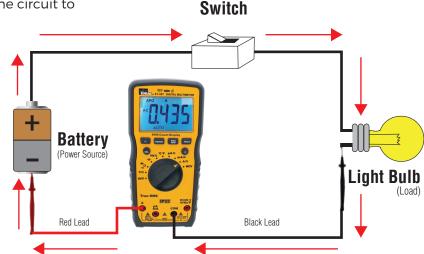
To properly conduct a current measurement in accordance with Electrical Safety-related Work Practices (ESWP) you must:

 de-energize the circuit, disconnect the circuit, insert the meter into the circuit, re-energize the circuit to test current

 AND THEN... repeat the whole process again to "remove" the meter from the circuit after the test.

Limited to 10A AC/DC Measurement

Fuse Protection required (due to current pass-through)





### **FORK METERS**



61-415 | 61-405



Patented TightSight®
Backlit Display eliminates need
to bend or twist conductors or
place your head near or in the
panel and allows you to easily
read the bottom display when
taking measurements







#### TIGHTSIGHT® CLAMP METERS





61-775 1000A AC/DC Clamp Meter TightSight® w/Backlight CAT IV 600V | CAT III 1000V





61-765 660A AC/DC Clamp Meter TightSight® w/Backlight CAT IV 600V | CAT III 1000V





61-757
600A AC/DC
Clamp Meter
TightSight® w/Backlight
& Flashlight
CAT IV 600V | CAT III 1000V





**61-747**400A AC/DC
Clamp Meter
TightSight® w/Backlight
& Flashlight
CAT III 600V





61-415
200A AC/DC
Split Jaw Meter
TightSight® w/Backlight
& Flashlight
CAT IV 600V | CAT III 1000V

### **CONVENTIONAL CLAMP METERS**

### **CLAMP METER ACCESSORIES**



**61-744** 400A AC Clamp Meter 4000 Count & Flashlight CAT III 600V



**61-737** 400A AC Clamp Meter 4000 Count w/Backlight CAT III 600V



**61-405** 200A AC Split Jaw Meter w/Backlight & Flashlight CAT III 600V



TL-757 Test Leads w/Alligator Clips



**TC-757** Thermocouple



**UMHS-757**Universal Magnetic
Hanging Strap



**C-757**Nylon Carrying Case

IMPORTANT: The clamp meters on this page are intended for use by qualified electricians. Follow the NFPA 70E Standard for Electrical Safety in the workplace when using this tester. Always consult the instruction manual provided with the tester for operational limitations and procedures associated with a specific tester.

### **CLAMP METER SPECIFICATIONS**

CLAMP METER SELECTION GUIDE			NEW	NEW
	61-775	61-765	61-757	61-747
FEATURES				
CAT Rating (Safety)	CAT IV 600V CAT III 1000V	CAT IV 600V CAT III 1000V	CAT IV 600V CAT III 1000V	CAT III 600V
Listing	cULus, CE, RCM	cULus, CE, RCM	cULus, CE, RCM	cULus, CE, RCM
Drop Protection			6.6 ft. (2m)	6.6 ft. (2 m)
Clamp/Jaw Opening	2.0 in. (50.8mm)	1.5 in. (38mm)	1.4 in. (35.5mm)	1.4 in. (35.5mm)
AC Voltage (Volts)	750V	750V	600V	600V
DC Voltage (Volts)	750V	750V	1000V	600V
AC Current (Amps)	1000A	660A	600A	400A
DC Current (Amps)	1000A	660A	600A	400A
Ohms (Resistance)	999.9Ω	999.9Ω	60ΜΩ	40ΜΩ
AC Millivolts	_	_	6000	4000
DC Millivolts		_	6000	4000
True RMS	<b>V</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>
High Voltage Alarm	<b>V</b>	<b>V</b>	ACV/DCV   >30V	ACV/DCV   >30V
Audible Continuity	<b>V</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>
Visual Continuity	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>
Backlight	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>
Temperature	-	-	-40°F ~ 1832°F -40°C ~ 1000°C	-40°F ~ 1832°F -40°C ~ 1000°C
Low Impedance (LoZ)	_	_	<b>✓</b>	_
NCV	-	-	40-600V	40-600V
Auto Ranging	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>
Range Hold	_	_	<b>✓</b>	<b>✓</b>
Data Hold	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>
Relative	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>
Diode Test	_	_	<b>✓</b>	<b>✓</b>
Capacitance Test	V	<b>V</b>	6.000mF	4.000mF
Frequency / Duty Cycle	<b>V</b>	<b>✓</b>	10Hz~9.999KHz	10Hz~9.999KHz
Max / Min	V	<b>V</b>	<b>V</b>	<b>V</b>
Magnetic Strap Mount	_	_	<b>V</b>	<b>V</b>
Test Probe Holder	_		V	V
Flashlight	_	_	V	V
Auto-Power Off (APO)	<b>✓</b>	<b>✓</b>	V	V
APO Disable	<u> </u>	<u> </u>	<u> </u>	V
Low Battery Indication	<b>V</b>	V	<b>V</b>	V
Battery Type (Included)	1 x 9 Volt	1 x 9 Volt	3 x 1.5V AAA	3 x 1.5V AAA
Bottom LCD Display	1 X 9 VOIL	/ V	3 X 1.3 V AAA	3 X 1.3 V AAA
LCD Display Count	9999	9999	6000	4000
Warranty	2-Year*	2-Year*	2-Year*	2-Year*
ACCESSORIES				
Leads & Alligator Clips (TL-757)	Included	Included	Included	Included

### **CLAMP METER SPECIFICATIONS**

CLAMP METER SELECTION GUIDE		NEW	NEW	NEW
	61-744	61-737	61-415	61-405
FEATURES				
CAT Rating (Safety)	CAT III 600V	CAT III 600V	CAT IV 600V CAT III 1000V	CAT III 600V
Listing	cULus, CE, RCM	cULus, CE, RCM	cULus, CE, RCM	cULus, CE, RCM
Drop Protection		3.3 ft. (1m)	6.6 ft. (2m)	3.3 ft. (1m)
Clamp/Jaw Opening	1.45 in. (36.5mm)	1.4 in. (35.5mm)	0.75 in. (19mm)	0.75 in. (19mm)
AC Voltage (Volts)	600V	600V	1000V	1000V
DC Voltage (Volts)	600V	600V	1000V	1000V
AC Current (Amps)	600A	400A	200A	200A
DC Current (Amps)	_	_	200A	_
Ohms (Resistance)	40ΜΩ	40ΜΩ	60ΜΩ	60MΩ
AC Millivolts	_	4000	✓	<b>✓</b>
DC Millivolts	_	4000	<b>✓</b>	<b>✓</b>
True RMS	_	<b>✓</b>	✓	V
High Voltage Alarm	_	ACV/DCV   >30V	ACV/DCV   >30V	ACV/DCV   >30V
Audible Continuity	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>
Visual Continuity	_	<b>✓</b>	<b>✓</b>	<b>✓</b>
Backlight	_	<b>✓</b>	<b>✓</b>	<b>✓</b>
Temperature	_	-40°F ~ 1832°F -40°C ~ 1000°C	_	-
Low Impedance (LoZ)	_	_	_	_
NCV	70-600V	40-600V	40-600V	40-600V
Auto Ranging	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>
Range Hold	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>
Data Hold	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>V</b>
Relative	_	<b>✓</b>	<b>✓</b>	<b>V</b>
Diode Test	_	<b>✓</b>	<b>✓</b>	V
Capacitance Test	_	400.0µF	6.000mF	6.000mF
Frequency / Duty Cycle	_	10Hz~9.999KHz	_	_
Max / Min	_	<b>✓</b>	<b>✓</b>	<b>✓</b>
Magnetic Strap Mount	_	V	<b>✓</b>	V
Test Probe Holder	_	<b>✓</b>	<b>✓</b>	<b>V</b>
Flashlight	_	_	<b>✓</b>	<b>✓</b>
Auto-Power Off (APO)	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>
APO Disable	_	_	<b>✓</b>	<b>V</b>
Low Battery Indication	<b>V</b>	<b>✓</b>	<b>✓</b>	<b>V</b>
Battery Type (Included)	2 x 1.5V AAA	3 x 1.5V AAA	2 x 1.5V AAA	2 x 1.5V AAA
Bottom LCD Display	_	-	<b>✓</b>	_
LCD Display Count	4000	4000	6000	6000
Warranty	2-Year*	2-Year*	2-Year*	2-Year*
ACCESSORIES				
Leads, Case & Batteries	Leads only	Included	Included	Included
Thermocouple (TC-757)	_	Included	_	_

### MULTIMETER VS. CLAMP/FORK METER



**Safety** - A fork meter allows you to measure AC or DC current (depending on the model) by positioning the fork around a conductor, which is much safer than making direct contact with a live circuit.

**Productivity** - During a measurement, it is not necessary to shut off the circuit carrying current, which improves productivity.

Limited to 200A AC/DC Measurement

No Fuse Protection required



**Safety** - A clamp meter allows you to measure AC or DC current (depending on the model) by positioning the clamp jaw around a conductor, which is much safer than making direct contact with a live circuit.

**Productivity** - During a measurement, it is not necessary to shut off the circuit carrying current, which improves productivity. This allows isolation of a conductor being tested in a bundle of conductors.

Limited to 2000A AC/DC Measurement (Hard Clamp)

No Fuse Protection required

Multimeters measure current differently than a fork or clamp meter. To measures current with a multimeter:

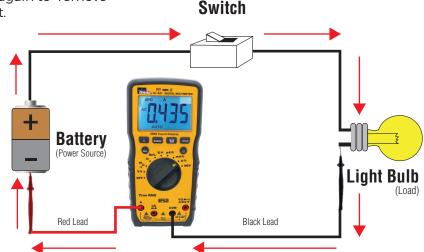
• You must insert the multimeter into the circuit to get the current to flow THROUGH the meter and are making direct contact with the live circuit.

To properly conduct a current measurement in accordance with Electrical Safety-related Work Practices (ESWP) you must:

- de-energize the circuit, disconnect the circuit, insert the meter in the circuit, re-energize the circuit to test current
- AND THEN... repeat the whole process again to "remove" the meter from the circuit after the test.

Limited to 10A AC/DC Measurement

Fuse Protection required (due to current pass-through)



### **DIGITAL MULTIMETERS**



### **DIGITAL MULTIMETERS**



61-357 1000V Auto Range TRMS 6000 Count Display Multimeter w/ NCVT, Temp, Bar Graph & LoZ CATIV 600V | CATIII 1000V



61-347 1000V Auto Range TRMS 6000 Count Display Multimeter w/NCVT, & Temp CAT IV 600V | CAT III 1000V



**61-337** 600V Auto Range Multimeter w/NCVT & Temp CATIII 600V



**61-327** 600V Manual Range Multimeter w/ NCVT CATIII 600V











### **ACCESSORIES**



**TL-757**Test Leads



**UMHS-757**Universal Magnetic
Hanging Strap



**F-347-357P**11A (1000V) & 600mA (1000V)
Fuses for 61-347 & 61-357



**F-337P** 10A (600V) & 400mA (600V) Fuses for 61-337



**TC-757** Thermocouple



**C-357**Nylon Carrying Case





### **DIGITAL MULTIMETERS FEATURES**

DIGITAL MULTIMETER SELECTION GUIDE	NEW	NEW	NEW	NEW
	61-357	61-347	61-337	61-327
FEATURES				
CAT Rating (Safety)	CAT IV 600V CAT III 1000V	CAT IV 600V CAT III 1000V	CAT III 600V	CAT III 600V
Listing	cULus, CE, RCM	cULus, CE, RCM	cULus, CE, RCM	cULus, CE, RCM
Drop Protection	6.6 ft. (2m)	6.6 ft. (2m)	3.3 ft. (1m)	3.3 ft. (1m)
Ingress Protection	IP52	IP52	_	_
AC Voltage (Volts)	1000V	1000V	600V	600V
DC Voltage (Volts)	1000V	1000V	600V	600V
AC Current (Amps)	10A	10A	10A	_
DC Current (Amps)	10A	10A	10A	_
Ohms (Resistance)	60ΜΩ	60ΜΩ	40ΜΩ	4MΩ
AC Millivolts	6000	6000	4000	_
DC Millivolts	6000	6000	4000	4000
AC Milliamps	6000	6000	4000	_
DC Milliamps	6000	6000	4000	-
AC Microamps	6000	6000	4000	_
DC Microamps	6000	6000	4000	_
True RMS	<b>✓</b>	<b>✓</b>	_	_
High Voltage Alarm	ACV/DCV   >30V	ACV/DCV   >30V	ACV/DCV   >30V	ACV/DCV   >30V
Audible Continuity	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>
Visual Continuity	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>
Backlight	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>
Temperature	-40 ~ 1832°F -40 ~ 1000°C	-40 ~ 1832°F -40 ~ 1000°C	-40 ~ 1832°F -40 ~ 1000°C	_
Low Impedance (LoZ)	<b>✓</b>	_	_	_
NCV	<b>✓</b>	<b>✓</b>	<b>V</b>	_
Auto Ranging	<b>✓</b>	<b>V</b>	<b>✓</b>	_
Range Hold	<b>✓</b>	<b>V</b>	<b>V</b>	_
Data Hold	<b>V</b>	V	<b>V</b>	<b>✓</b>
Diode Test	<b>V</b>	<b>V</b>	V	V
Capacitance Test	6000 µF	6000 µF	4000 μF	_
Frequency / Duty Cycle	10Hz - 9.99 KHz	10Hz - 9.99 KHz	10Hz - 9.99 KHz	10Hz - 9.99 KHz
Max / Min	<b>✓</b>	<b>✓</b>	<b>✓</b>	_
Magnetic Strap Mount	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>
Test Probe Holder	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>
Auto-Power Off	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>
APO Disable	<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>
Low Battery Indication	<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>
Battery Type (Included)	3 x 1.5V AAA	3 x 1.5V AAA	3 x 1.5V AAA	3 x 1.5V AAA
LCD Display Count	6000	6000	4000	4000
Lead Warning	<b>V</b>	<b>V</b>	<b>V</b>	_
Fuse Notification	<b>V</b>	<b>V</b>	V	_
Bar Graph	<b>V</b>	_	_	_
Battery Test		<u>_</u>	_	<i>V</i>
Warranty	2-Year*	2-Year*	2-Year*	2-Year*
Accessories	Z-16ai	Z-16ai	Z-Teal	Z-16ai
Leads, Case & Temp. Sensor	Included	Included	Included	Leads Only
Thermocouple (TC-757)	Included	Included	Included	Leads Offig
mermocoupie (TC-757)	included	included	included	_

### **VOLTAGE TESTERS**



Scan this QR code with your smartphone to see a video and learn more about the testers.







**UMHS-757** Universal Magnetic Hanging Strap (61-557)



**TL-757** Test Leads









#### **VOLTAGE TESTERS FEATURES**



61-557

Voltage and Continuity Tester w/LCD, GFCI, Flashlight & NCVT 6-600V AC/DC CAT IV 600V



61-547
8 Level AC/DC Voltage Indicator
with Polarity Indicator
12-600V DC | 24-600V AC
CAT III 600V



**61-076**Vol-Con® Voltage/Continuity Tester
5-600V AC/DC
CAT III 600V



**61-065**Vol-Test® Voltage Tester
100-600V AC/DC
CAT III 600V

















#### **VOLTAGE TESTER SELECTION GUIDE**











			<u> </u>	
	61-557	61-547	61-076	61-065
FEATURES				
CAT Rating (Safety)	CAT IV 600V	CAT III 600V	CAT III 600V	CAT III 600V
Listing Preferred	cULus, CE	cULus, CE	cULus	cULus
Drop Protection	6.6 ft. (2m)	6.6 ft. (2m)		
Ingress Protection	IP42	IP42	_	_
AC Voltage (Volts)	6 ~ 600	24 ~ 600	5 ~ 600	100 ~ 600
DC Voltage (Volts)	6 ~ 600	12 ~ 600	5 ~ 600	100 ~ 600
High Voltage Alarm	ACV >30 or DCV >30V	ACV/DCV >48V	-	_
Audible Continuity	<b>✓</b>	_	_	_
Visual Continuity	<b>✓</b>	_	<b>✓</b>	_
Low Impedance (LoZ)	<b>✓</b>	_	<b>✓</b>	<b>✓</b>
NCV	90-600V AC	_	_	_
Auto Ranging	<b>✓</b>	_	_	_
Magnetic Strap Mount	<b>✓</b>	<b>✓</b>	_	_
Test Probe Holder	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>
Flashlight	<b>✓</b>	_	_	_
Auto-Power Off (APO)	<b>✓</b>	_	_	_
Low Battery Indicator	<b>✓</b>	_	_	_
Battery Type (Included)	3 x 1.5V AAA	_	4 x 1.5V LR44	_
LCD Display Count	600	_	_	_
Backlight	<b>✓</b>	_	_	_
DC Polarity Indication	<b>✓</b>	<b>✓</b>	<b>✓</b>	_
Leads	Removable	Fixed	Removable	Removable
GFCI Test	<b>✓</b>	_	_	_
Display	LCD	Neon Lamps	Indicator Movement	Indicator Movement
Warranty	2-Year*	2-Year*	2-Year*	2-Year*
ACCESSORIES				
Test Leads	TL-757	_	61-070	61-070
Magnetic Hanging Strap	UMHS-757	UMHS-757	_	_

### RECEPTACLE TESTERS

Scan this QR code with your smartphone to learn more about the testers.



#### **FEATURES**







**On/Off Button**Confirms Tester
is Working



**Green Lights**Indicate Correct Wiring



**Red Lights**Indicate Incorrect
Wiring



**LEDs Easily Visible**Plugged in or rotated to fit receptacles.

### **RECEPTACLE TESTER FEATURES**



61-517
120V AC GFCI
Receptacle/Voltage
Tester
CAT II 150V AC



**61-051** E-Z Check® Plus GFCI Circuit Tester



**61-035** E-Z Check® Circuit Tester



**61-501**GFCI Receptacle Tester











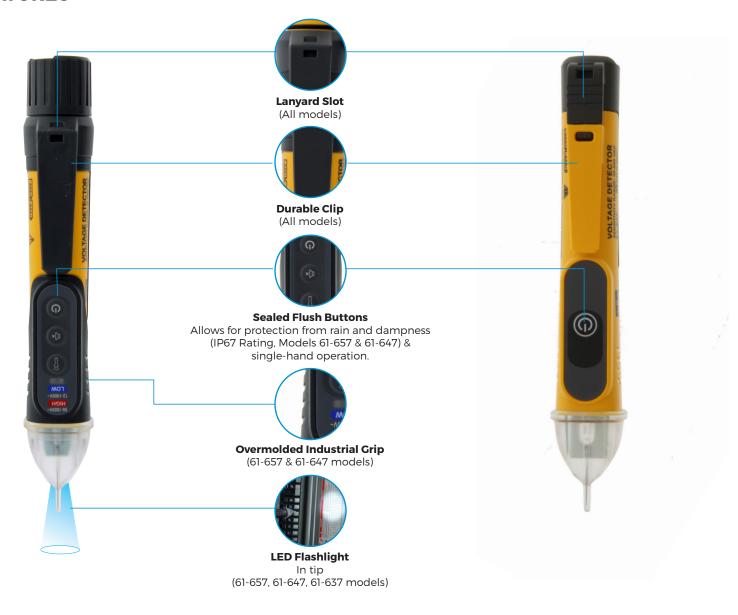




RECEPTACLE TESTER SELECTION GUIDE	TO BE OF THE STATE	The state of the s	The state of the s	17-57 A.S. 18-50 A.S.
	61-517	61-051	61-035	61-501
FEATURES				
Voltage Rating	120V AC	120V AC	120V AC	120V AC
Polarity Indication	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>
GFI Trip	<b>✓</b>	<b>V</b>	_	<b>V</b>
UL Listed	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>V</b>
Made in the USA	_	<b>V</b>	<b>✓</b>	_
Premium Neon Lamps	_	<b>✓</b>	<b>✓</b>	<b>V</b>
LCD Display	<b>✓</b>	_	_	_
Warranty	2-Year*	2-Year*	2-Year*	1-Year

### **NON-CONTACT VOLTAGE TESTERS**

### **FEATURES**



Scan this QR code with your smartphone to learn more about the testers.



### **NON-CONTACT VOLTAGE TESTERS FEATURES**



61-657 Dual Range 12 to 1000V AC NCVT w/Flashlight **CAT IV 1000V** 

61-647 Single Range 50 to 1000V AC NCVT w/Flashlight **CAT IV 1000V** 

61-637 Single Range 24 to 600V AC NCVT w/Flashlight CAT IV 600V

61-627 Single Range 50 to 600V AC NCVT CAT IV 600V











#### Dual Range on 61-657 only.



**Standard Voltage** Range Indicated by a Red LED



**Power On** Indicated by a Green LED



**Low Voltage** Range Indicated by a Blue LED



**Presence of** Voltage Indicated by a Flashing Red LED & Audible Tone

### **NON-CONTACT VOLTAGE TESTERS FEATURES**

NON-CONTACT VOLTAGE TESTER SELECTION GUIDE	NEW	NEW	NEW	NEW
	61-657	61-647	61-637	61-627
FEATURES				
CAT Rating (Safety)	CAT IV 1000V	CAT IV 1000V	CAT IV 600V	CAT IV 600V
Listing	cULus, CE, RCM	cULus, CE, RCM	cULus, CE, RCM	cULus, CE, RCM
Voltage Sensing Range	12 ~ 1000V AC	50 ~ 1000V AC	24 ~ 600V AC	50 ~ 600V AC
Dual Range	<b>✓</b>	_	_	_
Flashlight	<b>✓</b>	<b>✓</b>	<b>✓</b>	_
Drop Protection	6.6 ft. (2m)	6.6 ft. (2m)	3.3 ft. (1m)	3.3 ft. (1m)
Ingress Protection	IP67	IP67	_	_
Dual Range Sensitivity	<b>✓</b>	_	_	_
Audible Indication	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>
Audible Defeat	<b>✓</b>	<b>✓</b>	<b>✓</b>	_
Visual Indication	Green On, Flashing Red	Green On, Flashing Red	Green On, Flashing Red	Green On, Flashing Red
Visual Range Indicator	Blue Low, Red High	_	_	_
Lanyard Compatible	<b>✓</b>	<b>V</b>	<b>✓</b>	<b>✓</b>
Auto-Power Off (APO)	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>
Low Battery Indication	<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>
Battery Type (Included)	2 x 1.5V AAA			
Warranty	2-Year*	2-Year*	2-Year*	2-Year*

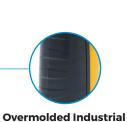
### **INFRARED THERMOMETERS**

#### **FEATURES**

Scan this QR code with your smartphone to learn more about the thermometers.























Complies with 21 CFR 1040.10 and 1040.11 except for conformance with IEC 60825-1 Ed. 3 as described in Laser Notice No. 56 dated May 8, 2019.

Specifications are subject to change without notice.

#### **INFRARED THERMOMETER SELECTION GUIDE**





	61-847	61-827
FEATURES		
Listing	cULus	cULus
Certification	CLASS 2, IEC 60825-1:2014	CLASS 2, IEC 60825-1:2014
Wavelength	630nm-670nm	630nm-670nm
Output	< 1mW	< 1mW
Listing	cULs, CE	cULs, CE
Drop Protection	6.6 ft. (2m)	3.3 ft. (1m)
Optical Resolution (distance-to-spot)	12 : 1	10 : 1
Measurement Range	-26° to 932°F (-32° to 500°C)	-4° to 752°F (-20° to 400°C)
Laser Targeting	Dual	Single
Auto Scan	<b>✓</b>	_
Max/Min/Avg/Diff	<b>✓</b>	_
High/Low Alarm	<b>✓</b>	_
Data Hold	<b>✓</b>	<b>✓</b>
Lock-on (for continuous measurements)	✓	_
Emissivity	0.10 - 1.00 Adjustable	0.95 Fixed
Backlit Display	<b>✓</b>	<b>✓</b>
Display	LCD	LCD
Auto Power-Off	<b>✓</b>	<b>✓</b>
Selectable Celsius / Fahrenheit	<b>✓</b>	<b>✓</b>
Battery Type (Included)	2 x 1.5V AAA	2 x 1.5V AAA
Low Battery Indicator	<b>✓</b>	✓
Response Time	250 ms	500 ms
Spectral Response	8 to 14µm	8 to 14µm
Warranty	2-Year*	2-Year*

### **SPECIALTY TESTERS**



**61-520** 3-Phase Rotation Tester



**61-521**3-Phase Motor/Rotation Tester



**61-797** Insulation Tester w/PI, DAR



**61-795** Insulation Tester











**61-796**3-Pole Ground
Resistance Tester



**61-920**Ground Resistance
Clamp Meter



**61-686**Digital Light
Meter

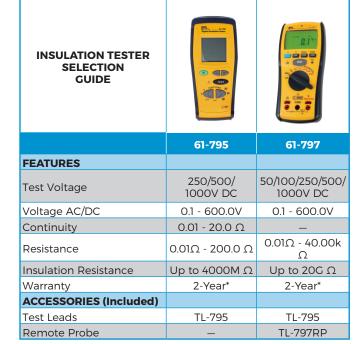






#### SPECIALTY TESTERS FEATURES

### **PHASE ROTATION** SELECTION GUIDE 61-520 61-521 **FEATURES** Motor Rotation Phase Rotation 120 to 600V AC Color Coded Leads Detachable Leads Warranty 2-Year\* 2-Year\* **ACCESSORIES (Included)** TL-521 Test Leads





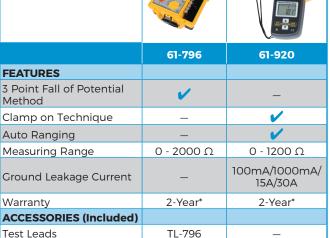
TL-521 Test Lead Set



TL-795 Test Lead Set w/Premium Alligator Clips

**TL-797RP** Remote Probe Test Lead Set

### **GROUND ROD TESTING SELECTION GUIDE** 61-796 **FEATURES** 3 Point Fall of Potential Method Clamp on Technique **Auto Ranging** Measuring Range 0 - 2000 Ω







TL-796 Earth Resistance Lead Set

### **ACCESSORIES**





**TL-532A** 120V AC Circuit Breaker Finder Adapter Kit



**TL-757**Universal Test Leads
& Alligator Clips



UMHS-757 Universal Magnetic Hanging Strap (For use with 61-405, 61-415, 61-737, 61-747, 61-757, 61-327, 61-337, 61-347, 61-357, 61-547 & 61-557)



TC-757 Thermocouple



TL-521 Test Lead Set



**TL-796**Earth Resistance Lead Set



**TL-797RP** Remove Probe Test Lead



**TL-795**Test Leads w/
Alligator Clips
(premium)

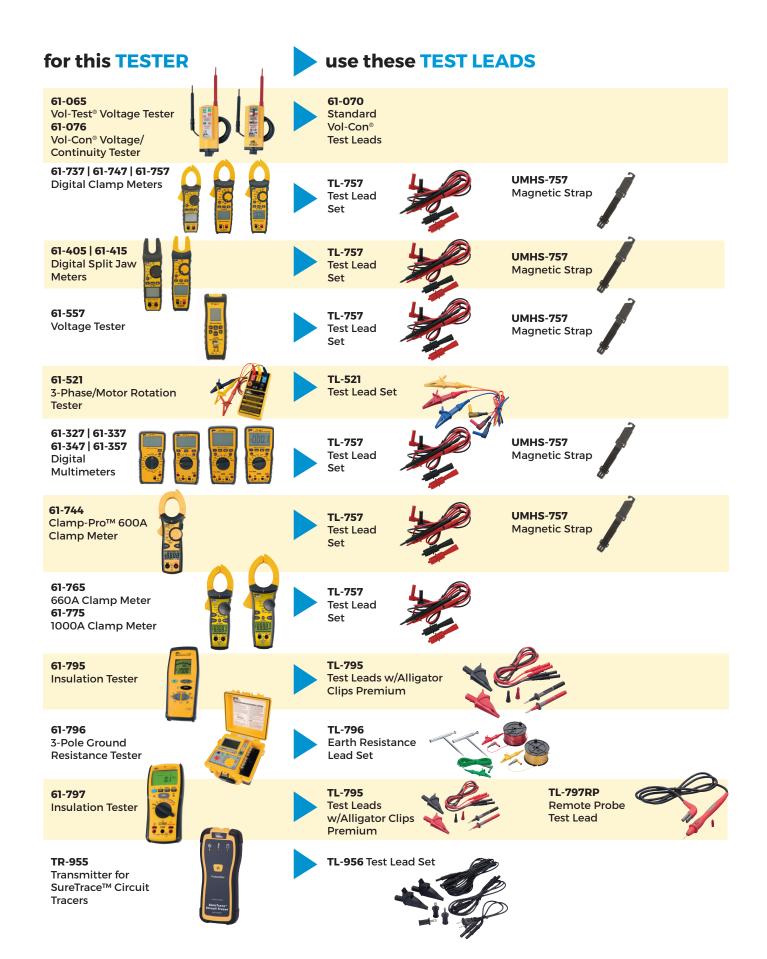


**61-070** Standard Test Leads (for use with 61-076 & 61-065)



**TL-956** Test Lead Set

#### **TEST LEAD SELECTION GUIDE**



### **CARRYING CASES**



Nylon Carrying Case



C-90 Nylon Carrying Case



C-290 Nylon Carrying Case



C-760 Nylon Carrying Case

NEW



C-770 Nylon Carrying Case



C-357 Nylon Carrying Case



NEW



C-757 Nylon Carrying Case

			OLTA(	160		30	00		40	00		70	00		740	770	790
		1-065	9/0-1	61-164	61-327	1-337	1-347	1-357	1-405	61-415	61-727	61-737	61-747	1-757	1-744	1-775	61-797
Selectio	n Guide	5	6	9	<b>O</b>	6	5	5	6	ဖ	<b>O</b>	ဖ	ဖ်	5	9	5	ဖ
61-179	Nylon Carrying Case			•													
C-90	Nylon Carrying Case	•															
C-290	Nylon Carrying Case																•
C-357	Nylon Carrying Case				•	•	•	•									
C-760	Nylon Carrying Case														•		
C-757	Nylon Carrying Case								•	•	•	•	•	•			
C-770	Nylon Carrying Case																

### REPLACEMENT PARTS SELECTION GUIDE

			090	060 070			300	0		7	400		500	0		730		240	750	094	077		790		950
		,	61-065	61-076	61-327	61-337	61-340	61-342	61-347	61-357	61-486	61-532 61-521	61-534	61-547	61-557	61-737	61-744	61-747	61-757	61-765	61-775	61-795	61-796	61-797	TR-955
FUSES								П				Н													
F-105	1A (600V)	10.3 x 35mm																				•			
F-340	0.5A (500V)	6.35 x 32mm						•																	
F-341	10A (1000V)	10 x 38mm					•	•																	
	400mA (600V)	6.5 x 32mm				•																			
F-537P	10A (600V)	10 x 38mm				•																			
	600mA (1000V) 6.5 x 32 mm	6.5 x 32 mm							•	•															
F-347-337P	11A (1000V)	10 x 38mm							•	•															
F-497	600mA (1000V) 10 x 35mm	10 x 35mm									•														
F-498	11A (1000V)	10 x 38mm									•														
F-797	315mA (1000V)	5 x 32mm																						•	
BATTERIES																									
	AA																					•	•	•	•
I	1.5V (AAA)				•	•			•	•					•	•	•	•	•						
I	Λ6											•	•							•	•				
	LR44			•																					
TEST LEADS																									
TL-796	Earth Resistance Lead Set	Lead Set																					•		
TL-797RP	Remote Probe Test Lead	st Lead																						•	
61-070	Standard Test Leads	ads	•	•																					
TL-757	Universal Test Leads & Alligator Clips	ads &			•	•			•	•				•	•	•	•	•	•	•	•				
TL-521	Test Lead Set											•													
TL-795	Test Leads w/Alligator Clips (Premium)	yator Clips																				•		•	
TL-956	Test Lead Set																								•

### SAFETY IN THE FIELD

### **IEC (International Electrotechnical Commission) Category Ratings**



**Category I** - The signal level for telecommunications, electronic and other low-energy equipment with transient limiting protection. Peak impulse transient range is 600-4,000 volts with 30 ohm source.



Category II - The local level for fixed and non-fixed powered devices including appliances, lighting and portable equipment. Outlets located more than 30 feet from CAT III sources and 60 feet from CAT IV sources. Peak impulse transient range is from 600-6.000 volts with a 12 ohm source.

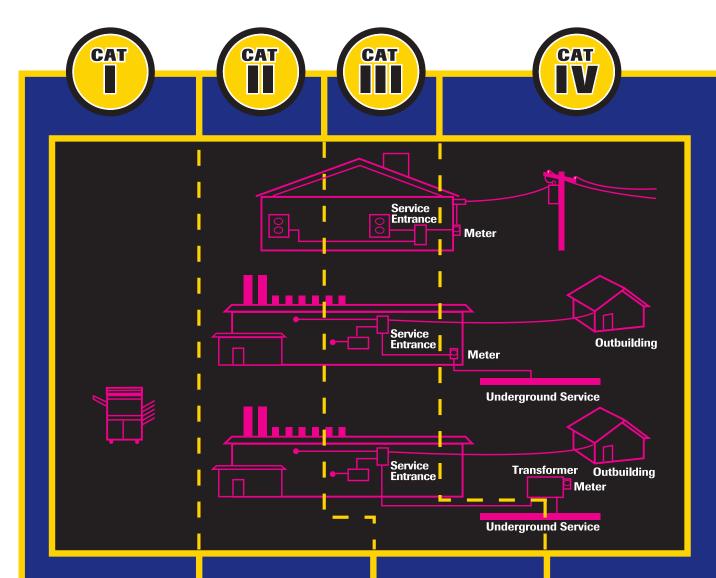


**Category III** - The distribution level for fixed primary feeders or branch circuits. Circuits that are separated from CAT IV sources by at least one level of transformer isolation. Peak impulse transient range is 600-8,000 volts with a 2 ohm source.



Category IV - The primary supply level for the highest levels of transient over voltage. Includes the utility service both outside and at the service entrance, service drop from the pole to the building, overhead line to remote buildings, and underground line to a well pump. Peak impulse transient range is 600-12.000 volts with less than a 1 ohm source.

Visit idealind.com for more technical product details, application support, white papers, videos and software.



### CAT I Copiers

- Electronic equipment
- Low energy equipment with transient limiting protection

### CAT II Appliances, PCs, TVs

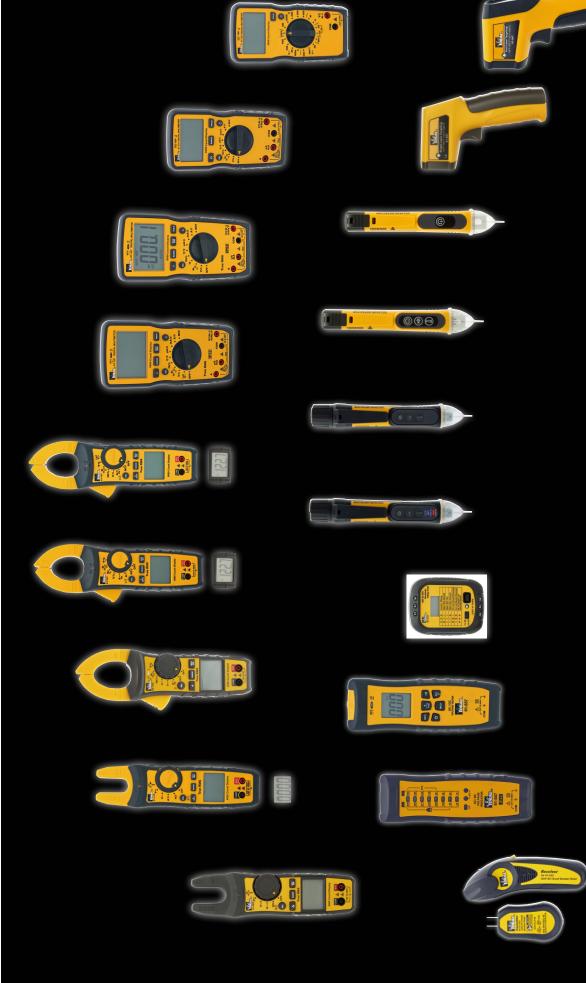
- Outlets and long branch equipment
- All outlets at more than 10m (30 ft) from Category III source
- All outlets at more than 20m (60 ft) from Category IV source

### CAT III MC Panels

- Feeders and short branch circuits
- Distribution panel devices
- Heavy appliance outlets with "short" connections to service entrance

### CAT IV Exterior Transformers, Meters

- Outside and service entrance
- Service drop from pole to building
- Overhead line to detached building
- Underground line to well pump







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