Southwire™ | TOOLS & EQUIPMENT

Meters and Testers

Multimeters and Clamp Meters

AutomationDirect is proud to offer a variety of meters and testers from Southwire to tackle any electrical application. Our meters are able to measure AC/DC voltage, current, resistance, continuity, capacitance, frequency, duty cycle, or temperature. Each Southwire meter carries the UL mark and meets or exceeds the testing requirements. Whether you are testing for the absence of voltage or troubleshooting a complex electrical problem, these meters have you covered.

Features

- Up to CAT IV safety ratings
- Test for AC/DC voltage, current, resistance, continuity, and more
- Auto and manual ranging
- Models available with non-contact voltage and detectors; built-in LED flashlight
- Models available with temperature function and include the thermocouple and adapter
- All include batteries and test leads

16020N

23070T

Safety Category Ratings		
Category Rating	***Brief Description***	***Typical Applications***
CAT IV	Connection point to utility power and outdoor conductors	• Electricity meters, primary overcurrent protection equipment • Outside and service entrance, service drop from pole to building, run between meter and panel • Overhead line to detached building, underground line to well pump
CAT III	Three-phase circuits and single phase lighting circuits in commercial buildings	• Equipment in fixed installations, such as switchgear and polyphase motors • Bus and feeder in industrial plants • Feeders and short branch circuits, distribution panel devices • Lighting systems in larger buildings • Appliance outlets with short connections to service entrance
CAT II	Single-phase receptacles and connected loads	• Appliance, portable tools, and other household and similar loads • Outlet and long branch circuits • Outlets at more than 10 meters (30 feet) from CAT III source • Outlets at more that 20 meters (60 feet) from CAT IV source
CAT I	Electronics	• Protected electronic equipment • Equipment connected to (source) circuits in which measures are taken to limit transient overvoltages to an appropriately low level

The measurement category (CAT) rating and voltage rating for a meter is determined by a combination of the meter, test probes and any accessories connected to the meter. The combination rating is the LOWEST rating of any individual component.
Always de-energize power before accessing an electrical enclosure.
Always follow safety and lockout/tagout procedures when working on or near electrical systems and equipment.
Use proper personal protective equipment (PPE) when working around sources of hazardous electrical energy.

Southwire™ TOOLS & EQUIPMENT

Meters and Testers

Multimeters

Measure AC/DC voltage, current, resistance, continuity, capacitance, frequency, duty cycle, or temperature with one of these tough Southwire meters. Trust that all these Southwire meters meet or exceed the UL's various testing equipment standards and carry the UL mark. Regardless if just testing for the presence of voltage, or troubleshooting the toughest problem, we have you covered.

Features

- Up to CAT IV safety ratings
- Test for AC/DC voltage, current, resistance, continuity, and more
- Auto and manual ranging
- Models available with non-contact voltage and detectors; built-in LED flashlight
- Models available with temperature function and include the thermocouple and adapter
- All include batteries and test leads

Multimeters

Part Number	Description	Weight (lbs)	Qty/Pkg	Price
10031S	Southwire digital multimeter, AC/DC voltage, DC current, resistance, continuity and battery tester, CAT III 600V. Test leads included.	0.91	1	$41.50
10041N	Southwire autoranging digital multimeter, AC/DC voltage, AC/DC current, resistance, continuity, capacitance, frequency, non-contact AC voltage detection, battery tester and temperature, CAT III 600V. Test leads included.	0.97	1	$68.00
14060S	Southwire TechnicianPRO autoranging digital multimeter, AC/DC voltage, AC/DC current, resistance, continuity, capacitance, frequency and temperature, CAT IV 600V/CAT III 1000V. Test leads included.	1.7	1	$130.00
16020N	Southwire autoranging digital multimeter, AC/DC voltage, AC/DC current, resistance, continuity, capacitance, frequency and non-contact AC voltage detection, CAT I VAC 600V. Built-in test leads included.	0.64	1	$51.00

10031S

10041N

14060S

16020N

Multimeters Specifications

Family	TechnicianPRO™	Compact Series	General Purpose	
Model Number	14060S	16020N	10041N	10031S
Safety Rating	CAT IV 600V, CAT III 1000V	CAT IV 600V	CAT III 600V	CAT III 300V CAT II 600V
AC/DC Voltage	1000V	600V	600V	600V
AC/DC Current	10A	200mA	10A	10A (DC only)
Input Impedance	10MΩ AC/DC Voltage	> 7.5MΩ AC/DC Voltage	> 10MΩ AC/DC Voltage	
Backlighting	Controls, Display	Display	Display	-
MAX/MIN	X	-	-	-
Temperature	X	-	X	-
Built-in NCV*	-	100V-600V	50V-600V	-
Peak Hold	-	-	-	-
Resistance	60MΩ	40MΩ	40MΩ	2.0 MΩ
Diode Test	X	X	X	-
Capacitance	4000µF	100µF	100µF	-
Frequency	10kHz	10kHz	10kHz	-
Duty Cycle	X	X	X	-
Built-in-Worklight	X	X	-	-
Drop Protection	2m	2m	2m	2m

*** NCV - Non-Contact Voltage**

Southwire™ TOOLS & EQUIPMENT

Meters and Testers

Clamp Meters

The Southwire23070T MaintenancePRO™ 1000A TrueRMS AC/DC clamp meter measures AC and DC current up to 1000A and with a UL listed safety rating of CAT IV 600V / CAT III 1000V, this clamp meter is built to get the tough jobs done. Other functions include: AC and DC Voltage, Resistance, Continuity, Capacitance, Frequency, Duty Cycle, Temperature, and Diode Test. A built-in non-contact AC voltage detector and flashlight provide added convenience.

Features

- CAT IV 600V / CAT III 1000V
- 11 measuring functions
- Clamp-On function reads both AC and DC current up to 1000 Amps
- Built in non-contact AC voltage detector
- Powerful LED work light
- Includes test leads, Type K temperature probe with banana plug adapter, carrying case, and 9 volt battery

Clamp Meters			
Part Number	***Description***	***Weight (lbs)***	***Price***
23070T	Southwire MaintenancePRO autoranging clamp meter, True RMS AC/DC voltage, AC/DC current, resistance, continuity, capacitance and frequency, CAT IV 600V/CAT III 1000V. Test leads included.	1.84	$218.00

Clamp Meters Specifications	
Model Number	23070T
Safety Rating	CAT IV 600V CAT III 1000V
AC/DC Voltage	1000V
AC Current	1000A
DC Current	1000A
True RMS	X
Input Impedance	10MΩ AC/DC Voltage
Worklight	X
Backlit Display	X
Drop Protection	1.5m
Display Count	6000
Bar Graph	X
MAX/MIN/AVG	MAX/MIN
Temperature	X
Built-in NCV*	100-1000V
Resistance	60MΩ
Continuity	X
Diode Test	X
Capacitance	6000µF
Frequency	10MHz
Duty Cycle	X
Auto Power Off	-

*** NCV - Non-Contact Voltage**

Southwire™ | TOOLS & EQUIPMENT

Meters and Testers

Non-Contact Voltage Tester

- Green LED means power on, flashing red LED with beeper means voltage detected
- Low battery self-test
- Two modes: green means high voltage mode, yellow means low voltage mode
- Bright LED flashlight
- Thinner probe tip for working with wall outlets
- On/Off power switch
- Pocket clip for easy storage

Voltage Tester				
Part Number	***Description***	***Price***	***Weight (lbs)***	***Qty/Pkg***
40126N	Southwire voltage tester, non-contact AC voltage detection, CAT IV 600V.	$23.50	0.21	1
*** NCV - Non-Contact Voltage**				

Voltage Tester Specifications	
Model #	40126N
Safety Rating	CAT IV 600V
Voltage Measurement Range	24-600 VAC
NCV* Detection Range	24-600 VAC
Input Impedance	-
Frequency Range	50/60 Hz
Display	-
Worklight	Yes
Test Leads	-
On/Off Button	Yes
Low Batt Self Test	Yes
Auto Power Off	Yes
Drop Protection	1.5m
Operating Temperature	32 to 104°F [0 to 40°C]
Storage Temperature	14 to 140°F [-10 to 60°C]
Maximum altitude	2000m
Humidity	Max 80% RH (NC)
Power	Two AAA batteries (included)

Southwire™ TOOLS & EQUIPMENT

Meters and Testers

Continuity Testers

The Southwire 40040S provides a simple way of checking continuity on wires and cables. The bright LEDs and loud beeper provide a positive indication of continuity and polarity. The M550 gives instant continuity status for category and coaxial cables. Featuring rugged double molded tester body and easy-to-interpret LED display. Both have a detachable remote that allows cables and wires to be tested after installation.

Features

- 40040S can trace up to 3 cables at a time
- Detachable remote indicator
- LEDs provide visual indication of continuity
- Audible beeper on 40040S provides additional verification of electrical connections
- M550data/video cable tester detects issues with network and coaxial cables
- M550 test for correct wiring, opens, shorts, reversals, miswires, split pairs, and shielded cables
- The M550 removable remote allows for the testing of installed cable
- Both units come with leads and cable required to connect to any number of cable types
- Batteries included

40040S

M550

Continuity Tester Specifications		
Model #	***40040S***	***M550***
Indicators	LED	LED
Maximum Cable Length	10,000 feet (3000m)	1000 feet (305m)
On/Off Button	Yes	
Auto Power Off	No	
Operating Temperature	10 to 113°F [-12 to 45°C]	32 to 122°F [0 to 50°C]
Storage Temperature	-4 to 140°F [-20 to 60°C]	
Humidity	Max 90% RH (NC)	Max 80% RH (NC)
Power	One 9 volt battery	Two AAA batteries (included)

Testers Selection Table				
Part Number	***Description***	***Price***	***Weight (lbs)***	***QtyPkg***
40040S	Southwire continuity tester, remote included. For use with individual wires and multiconductor cables.	$34.50	0.46 lb	1
M550	Southwire data/video cable tester, for use with Cat 7, Cat 7a, Cat 6a, Cat 6, Cat 5e, Cat 5, Cat 4, Cat 3 and Coax.	$52.00	0.51 lb	1

Southwire™ TOOLS & EQUIPMENT

Meters and Testers

Multimeters and Clamp Meters

The Southwire Electrical Test Kit combines three of Southwire's most popular test and measurement products into one convenient kit. Ideal for electrical repairs and troubleshooting on the job site or in the home.

Features

- The 10031S multimeter measures AC/DC voltage, DC current, resistance, and functions as a battery tester with a safety rating of CAT III 600V. This makes this specific multimeter a must-have for every toolbox
- The 40117N Non-Contact AC Voltage Detector has flashing green LED to indicate it is on, which changes to red and a beeper sounds if voltage is detected
- Convenient LED Flashlight in the 40117N saves space in your pocket or tool pouch
- Auto power-off feature for both the 10031S and 40117N to conserve and extend battery life
- Receptacle tester detects wiring configurations and indicates correct wiring, open ground, open hot, open neutral, hot/ground reversed and hot/neutral reversed
- Includes test leads and batteries for 10031S and 40117N

Test Kit				
Part Number	***Description***	***Price***	***Weight (lbs)***	***Qty/Pkg***
10037K	Southwire electrical test kit, includes 10031S manual-ranging multimeter, a non-contact AC voltage detector and receptacle tester.	$47.00	1.2	1

Test Kit Specifications			
Model #	***10031S***	***40117N***	***40012S***
Safety Rating	CAT III 300V CAT II 600V	CAT IV 1000V	-
Voltage Measurement Range	600V	-	110-125VAC
DC Current	20mA/200mA/10A (fused)	-	-
NCV* Detection Range	-	90VAC - 1000VAC	-
Frequency Range	45 Hz - 400 Hz	50/60 Hz	60 Hz
Display / Indicator	LCD	Red/Green LEDS	Reg/Amber LEDS
Worklight	-	Yes	-
Test Leads	Removable	-	-
On/Off Button	Rotary Switch	Momentary Button	-
Hold	Manual (Button)	-	-
Low Batt Self Test	-	X	-
Auto Power Off	>15 minutes	>5 minutes	-
Operating Temperature	32 to 104°F [0 to 40°C]		
Storage Temperature	14 to 122°F [-10 to 50°C]		
Maximum altitude	2133m	2000m	
Humidity		Max 80% RH (NC)	
Power	One 9V battery (included)	Two AAA batteries (included)	-

*** NCV - Non-Contact Voltage**

Southwire™ | TOOLS & EQUIPMENT

Meters and Testers

Test Lead Set

60010S Test Lead Kit includes universal replacement leads for all Southwire meters except for the 10010S Analog Multimeter..

Features

- UL listed CAT IV 600V, CAT III 1000V Test Leads
- 39in test leads
- 1000V AC/DC (Max)
- 10 Amp Current (Max)
- Includes removable CAT III 600V Alligator Clips

60010S

Test Lead Set				
Part Number	***Description***	***Pcs/Pkg***	***Weight (lbs)***	***Price***
60010S	Southwire test lead set, CAT IV 600V/CAT III 1000V, 48in length. For use with all Southwire meters except for the 10010S Analog Multimeter. Alligator clip adapters included.	1	0.31	$16.00