





Testing and measuring instruments

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IMMEDIATELY TO HAND – VOLTAGE TESTERS

Greenlee voltage testers - whether contactless or two-pole - are practically immediately to hand. Always to hand in pocket format, they measure voltages from 5 V to 1000 V AC and 12 V to 750 V AC/DC. If voltage is present, the tester emits an acoustic or optical signal as a warning. Ergonomically-shaped handles ensure the best grip, even when used outdoors. Stay safe with our Greenlee brand.



In brief

- Practical pocket format
- Automatic warning signals when voltage is present
- ▶ Also for contactless detecting
- ▶ Suitable for outdoor use



▶ Contactless measuring with the GT-16

The GT-16 is the practical pen-shaped voltage tester.

Automatic signalling in case of voltage and an integrated self-test make the GT-16 a tester with maximum user safety.

- Readily detects broken cables
- Maximum safety through CAT IV 1000 V
- Integrated self-test for optimum safety
- Optical and acoustic signal in case of voltage
- Select from various voltage levels via adjustable sensitivity
- Ergonomic handle
- Limited Lifetime Warranty





▶ Two-pole measuring with the GT-85NE

The Greenlee GT-85NE is the ideal solution for voltages from 12 V to 750 V AC/DC. Able to withstand adverse operating conditions.

- Wider AC and DC voltage measurement range
- Acoustic signal with voltages maximises safety
- Automatic phase sequence indicator

- Water and dust proof
- Drop-resistant from 1 m
- Suitable for outdoor use
- Limited Lifetime Warranty



GT-12A Contactless voltage tester 50 - 1000 V













- Contactless voltage testing
- Clear LED and acoustic warning signal when the voltage has been determined
- ON/OFF switch provides longer battery service life
- Handy pen format, which fits easily into a jacket or tool pocket
- Fast, easy replacement of batteries
- Automatic self test

| Technical data | | | |
|------------------------------|-------------------|----------|------|
| Frequency range | 50 - 500 Hz | | |
| Voltage range | 50 - 1000 V AC | | |
| Measuring category | CAT IV 1000 V | | |
| Item | | Part No. | |
| GT-12A Contactless voltage t | ester 50 - 1000 V | 52063422 | |
| Scope of supply | | Part No. | Page |
| Battery 2 x 1.5 V AAA | | | |

GT-16 Adjustable, contactless voltage tester 5 - 1000 V











- Contactless voltage testing
- Clear LED and acoustic warning signal when the voltage has been determined
- ON/OFF switch provides longer battery service life
- Handy pen format, which fits easily into a jacket or tool pocket
- Optimum handling due to ergonomically-shaped handle
- Fast, easy replacement of batteries
- Automatic self test
- Adjustable sensibility by rotary switch

| Technical data | | | |
|----------------------------------|--------------------------|----------|------|
| Frequency range | 50 - 500 Hz | | |
| Voltage range | 5 - 1000 V AC | | |
| Measuring category | CAT IV 1000 V | | |
| Item | | Part No. | |
| GT-16 Adjustable, contactless vo | oltage tester 5 - 1000 V | 52033580 | |
| Scope of supply | | Part No. | Page |
| Battery 1 x 1.5 V AAA | | | |









GT-55NE Bipolar voltage tester with LED display



Characteristics

- LED Display 12, 24, 50, 120, 230, 400, 750 V AC/DC
- Power LED for measuring point illumination
- Display of AC and DC voltage
- Bipolar rotary field testing
- Unipolar phase testing, optical and acoustic
- Continuity check, optical and acoustic
- Drop proof from 1 m
- Polarity indicator, loud beeper
- IP2X contact protection
- IP65 splash water proof and dust tight

| Technical data | | | |
|----------------------------------|--------------------------------------|----------|------|
| Frequency range | 45 - 65 Hz | | |
| Voltage range | 12 - 750 V AC/DC | | |
| Measuring category | CAT III 1000 V, CAT IV 600 V | | |
| Item | | Part No. | |
| GT-55NE Bipolar voltage tester v | with LED display | 52049408 | |
| Scope of supply | | Part No. | Page |
| Battery 2 x 1.5 V AAA | | | |
| Accessories | | Part No. | Page |
| TC-30 Nylon carrying case for m | neasuring instruments with belt loop | 50075365 | 593 |
| Replacement tips | | 52034234 | |

GT-85NE Bipolar voltage tester with LCD display







- LC display with backlit display
- Resistance measurement to 2 KΩ
- Power LED for measuring point illumination
- Display of AC and DC voltage
- Bipolar rotary field testing
- Unipolar phase testing, optical and acoustic
- Continuity check, optical and acoustic
- Drop proof from 1 m
- Polarity indicator, loud beeper
- IP2X contact protection
- IP65 splash water proof and dust tight

| Technical data | | | |
|------------------------------|---|----------|------|
| Voltage range | 12 - 750 V AC/DC | | |
| Resistance | 0 - 2 ΚΩ | | |
| Frequencymeasurement | 30 - 999 Hz | | |
| Measuring category | CAT III 1000 V, CAT IV 600 V | | |
| Item | | Part No. | |
| GT-85NE Bipolar voltage test | er with LCD display | 52049407 | |
| Scope of supply | | Part No. | Page |
| Battery 2 x 1.5 V AAA | | | |
| Accessories | | Part No. | Page |
| TC-30 Nylon carrying case fo | or measuring instruments with belt loop | 50075365 | 593 |
| Replacement tips | | 52034234 | |
| | | | |

VERSATILE IN USE – DIGITAL MULTIMETER

Greenlee multimeters are highly versatile. The functions are geared to your tasks in low-voltage systems. The multimeters measure on phase shift controllers, test conductors for breaks and indicate results in measurement categories CAT II, III and IV. To evaluate and archive the measurements, connect the devices to your PC via a USB cable. Select one multimeter for all tasks.





▶ Basic: Multimeter DM-510A

The DM-510A performs all elementary functions. This is the basic meter for every qualified electrician.

- Suitable for industrial electricians and in building installations
- Integrated contactless voltage tester for locating broken cables
- Temperature measurement function via a thermocouple type K (included in the scope of supply) for checking air-conditioning systems in control cabinets or buildings
- Elementary functions for trouble shooting



▶ Industrial application: Multimeter DM-820A

Equipped with true RMS measurement (TRMS function), the DM-820A can also measure non-sinusoidal voltages and currents precisely and reliably. The multimeter knows immediately if measuring lines are incorrectly connected and sends a warning signal and error message on the display.

- Can be used in all low-voltage systems in measurement category CAT IV 1000 V
- Measurements on frequency converters, phase shift controls and mains units without disruptions by voltage peaks
- Integrated TRMS function for measuring non-sinusoidal voltages and currents
- Automatic "Beep Jack" warning signal and optical signal on the display when measuring lines are incorrectly connected



▶ For dual displays: Multimeter DM-860A

Perfect for troubleshooting in electrical systems: The DM-860A allows you to measure and display two measurements at the same time. Saving time and providing an overview. All values are easily legibly on the large white display. The DM-860A withstands voltage peaks of up to 12,000 V.

- Extra large display for easy reading
- Dual display: Two measurements can be displayed at the same time
- Measurement category CAT IV 1000 V offers the best-possible safety
- Loop current function: Displays faults in measurement and control equipment

PDMM-20 Pocket digital multimeter













Characteristics

- AC/DC voltage measurement
- Resistance measurement
- Acoustic continuity check
- Contactless voltage testing

| Technical data | | | |
|------------------------------|-----------------------------|------------|------|
| Dimension | 113 x 53 x 13 mm | | |
| Weight | 0.08 kg | | |
| Display | LCD, 6000 | | |
| Capacitance | up to 100 μF | | |
| Voltage measurement | 1 mV - 450 V | | |
| Resistance | 0.001 kΩ - 6 MΩ | | |
| Frequencymeasurement | 10 Hz - 30 kHz | | |
| Measuring category | CAT II 450 V, CAT III 300 V | | |
| Item | | Part No. | |
| PDMM-20 Pocket digital multi | imeter | 50116894v2 | |
| Scope of supply | | Part No. | Page |
| Protective cover | | | |
| Test leads | | | |
| Battery 3V button cell | | | |
| | | | |

DM-200A Digital multimeter

















- Contactless voltage testing
- Automatic and manual range selection
- Large, background lit LC display
- Auto off
- Analogue bar chart
- Optical and acoustic warning in the event of incorrect handling

| Technical data | | | |
|----------------------------|--|------------|------|
| Toominour data | 101 00 50 | | |
| Dimension | 161 x 80 x 50 mm | | |
| Weight | 0.34 kg | | |
| Display | LCD, 6000 | | |
| Voltage measurement | 0.01 mV - 1000 V AC/DC | | |
| Current measurement | 0.1 μA - 8 A AC/DC | | |
| Resistance | 0.1 Ω - 60 ΜΩ | | |
| Frequencymeasurement | 10 Hz - 50 kHz sinus wave; 5 Hz - 1 MHz square wave logic lev | el | |
| Measuring category | CAT II 1000 V, CAT III 600 V, CAT IV | 300 V | |
| Interface | R>S232, USB | | |
| Item | | Part No. | |
| DM-200A Digital multimeter | | 52047801V2 | |
| Scope of supply | | Part No. | Page |
| TSG-3 test leads | | 50120344 | |
| Protective cover | | | |
| Battery 2 x 1.5 V AAA | | | |









DM-210A Digital multimeter for temperature measurement -50 °C up to +1000 °C

















Characteristics

- Includes thermoelement
- Automatic and manual range selection
- Large, background lit LC display
- Automatic shut-off
- Analogue bar chart
- Optical and acoustic warning in the event of incorrect handling

| Technical data | | | |
|---|--|------------|------|
| Capacitance | 60 nF - 3000 μF | | |
| Voltage measurement | 0.01 mV - 1000 V AC/DC | | |
| Current measurement | 0.1 μA - 8 A AC/DC | | |
| Resistance | 0.1 Ω - 60 ΜΩ | | |
| Frequencymeasurement | 10 Hz - 50 kHz sinus wave; 5 Hz - 1 MHz square wave logic lev | el | |
| Measuring category | CAT II 1000 V, CAT III 600 V, CAT IV 3 | 300 V | |
| Temperature measurement | -50 °C up to +1000 °C | | |
| Item | | Part No. | |
| DM-210A Digital multimeter for -50 °C up to +1000 °C | temperature measurement | 52047802V2 | |
| Scope of supply | | Part No. | Page |
| TSG-3 test leads | | 50120344 | |
| Protective cover | | | |
| Battery 2 x 1.5 V AAA | | | |

SAFETY FIRST!

Think about your safety and protect yourself from overvoltages in electrical systems!

Wear safety gloves to DIN EN 60903 and safety glasses! (page 519)





DM-510A Digital multimeter, True RMS



















- Autocheck function permits the automatic selection of AC V / DC V or resistance with low impedance for ghost-voltage removal
- Contactless voltage detection
- Frequency, temperature and capacity measurement
- Automatic and manual range selection
- Large, background lit LC display
- Max / Min value memory
- Analogue bar chart
- Optical and acoustic warning in the event of incorrect handling

| Technical data | | | |
|---|--------------------------------------|------------|------|
| Frequency range | 50 Hz - 400 Hz | | |
| Capacitance | 60 nF - 3000 μF | | |
| Voltage measurement | 0.01 mV - 1000 V AC/DC | | |
| Current measurement | 0.1 μA - 8A AC/DC | | |
| Resistance | 0.1 Ω - 60 ΜΩ | | |
| Frequencymeasurement | 5 Hz - 1 MHz | | |
| Measuring category | CAT III 600 V; CAT II 1000 V; CAT IV | 300 V | |
| Temperature measurement | -50 °C up to +1000 °C | | |
| Item | | Part No. | |
| DM-510A Digital multimeter, Tru | ue RMS | 52047803V2 | |
| Scope of supply | | Part No. | Page |
| TSG-3 test leads | | 50120344 | |
| Temperature sensor, bright finis | h | | |
| Battery 2 x 1.5 V AAA | | | |
| Accessories | | Part No. | Page |
| TC-20 Nylon carrying case for n with carrying strap | neasuring instruments | 50075357 | 587 |









DM-810A Digital multimeter, True RMS













Characteristics

- Automatic and manual range selection
- Large, background lit LC display
- Two measured values at a glance
- TRMS AC + DC
- Optical and acoustic warning in the event of incorrect handling

| Technical data | | | |
|--|------------------------|-------------------------------------|----------|
| Capacitance | 0.01 nF - 25 mF | | |
| Voltage measurement | 0.01 mV - 1000 V AC/DC | | |
| Current measurement | 0.1 μA - 10 A AC/DC | | |
| Resistance | 0.1 Ω - 60 ΜΩ | | |
| Frequencymeasurement | 5 Hz - 1 MHz | | |
| Measuring category | CAT IV, 1000 V | | |
| | | | |
| Item | | Part No. | |
| Item DM-810A Digital multimeter, | True RMS | Part No. 52047805V2 | |
| | True RMS | 1 4111101 | Page |
| DM-810A Digital multimeter, | True RMS | 52047805V2 | Page |
| DM-810A Digital multimeter, Scope of supply | | 52047805V2 Part No. | Page 587 |
| DM-810A Digital multimeter, Scope of supply TSG-3 test leads TC-20 Nylon carrying case for | | 52047805V2 Part No. 50120344 | |

DM-820A Digital multimeter, True RMS













- Contactless voltage detection
- Recording of peak value (5 ms peak hold) max, min and max/min results
- Automatic and manual range selection
- Large, background lit LC display
- Automatic shut-off
- TRMS AC + DC
- Optical and acoustic warning in the event of incorrect handling

| Technical data | | | |
|--|------------------------|--------------------------------------|----------|
| Capacitance | 0.01 nF - 25 mF | | |
| Voltage measurement | 0.01 mV - 1000 V AC/DC | | |
| Current measurement | 0.1 μA - 10 A AC/DC | | |
| Resistance | 0.1 Ω - 60 ΜΩ | | |
| Frequencymeasurement | 5 Hz - 1 MHz | | |
| Measuring category | CAT IV, 1000 V | | |
| Temperature measurement | -50 °C up to +1000 °C | | |
| | | | |
| Item | | Part No. | |
| Item DM-820A Digital multimeter, To | rue RMS | Part No. 52047806V2 | |
| 110111 | rue RMS | 7 3 3 1.13 | Page |
| DM-820A Digital multimeter, Ti | rue RMS | 52047806V2 | Page |
| DM-820A Digital multimeter, To Scope of supply | | 52047806V2 Part No. | Page 587 |
| DM-820A Digital multimeter, To Scope of supply TSG-3 test leads TC-20 Nylon carrying case for | | 52047806V2 Part No. 50120344 | |

DM-860A Industrial digital multimeter, True RMS













- Capturing Max, Min and Max-Min results
- Recording of peak value (5 ms peak hold) max, min and max/min results
- Carrying out frequency, temperature and capacity measurements as well as diode tests and continuity checks
- Display of the relative measured value offset for checking the relative measured value changes
- Automatic range selection
- Analogue 41-segment bar chart
- Large, background lit LC display
- Temperature measurements to 1000 °C

| Technical data | | | |
|-----------------------------------|---|---------------------|-----------|
| Capacitance | 50 nF - 9999 μF | | |
| Voltage measurement | 500 mV - 1000 V | | |
| Current measurement | 500 μA - 10 A | | |
| Resistance | $500~\Omega$ - $50~\text{M}\Omega$ | | |
| Frequencymeasurement | 5 Hz - 200 kHz sinus wave; 5 Hz - 2 l | MHz square wave lo | gic level |
| Measuring category | CAT IV 1000 V | | |
| Temperature measurement | Type-K, -50 °C up to +1000 °C (-58 | 3 °F up to +1832 °F | =) |
| Item | | Part No. | |
| DM-860A Industrial digital multi | meter, True RMS | 52056268V2 | |
| Scope of supply | | Part No. | Page |
| TSG-3 test leads | | 50120344 | |
| TC-20 Nylon carrying case for mea | asuring instruments with carrying strap | 50075357 | 587 |
| Temperature sensor, bright finis | h | | |











TC-20 Nylon carrying case with carrying strap for measuring instruments



Characteristics

With inner pocket for test leads

Suitable for

Series 200, Series 500 and Series 800 measuring instruments

| Item | Part No. |
|---|----------|
| TC-20 Nylon carrying case for measuring instruments with carrying strap | 50075357 |

CONTACTLESS MEASUREMENTS - DIGITAL CLAMP METERS

Quality evident in use. In practice, not every current circuit can be disconnected. Greenlee clamp meters measure currents and voltages without contact. AMP-TIPTM technology permits precise measurements even in confined areas. Numerous functions - one quality.



In brief

- ▶ Measure without disconnecting the cable
- Suitable for confined areas
- ► Easily legible display
- ▶ Contactless measurements to 600 A



▶ For alternating currents to 600 A

The CM-660 is a real lightweight. 185 g lies firmly in the hand thanks to a good grip. Convenient readily legible measurements.

- Contactless measurement of alternating currents up to 600 A
- Sensor for contactless voltage tests
- Lightweight construction saves weight in the tool case
- Built-in deep-pass filter for the most accurate measurements
- Hand grip guarantees very good handling





Expanded functions

The CM-960 is the model that performs several functions. It measures alternating and direct current to 600 A, also non-sinusoidal currents and voltages thanks to the TRMS function (true root mean square).

- Contactless measurement of alternating and direct currents up to 600 A
- Detect voltages without contact
- AMP-Tip technology for precise measurements up to 16 mm² conductor cross-section
- The backlit display guarantees very good legibility

CM-450 Digital clamp meter













Characteristics

- Compact, ergonomic design for measuring in tight spaces
- Data hold function for recording important measurement results
- Acoustic continuity check

| Technical data | | | |
|-------------------------|-------------------|------------|------|
| Display | LCD | | |
| Current measurement | 0.01 A - 400 A AC | | |
| Measuring category | CAT III 600 V | | |
| Jaw size | 26 mm | | |
| Item | | Part No. | |
| CM-450 Clamp multimeter | | 52033579V2 | |
| Scope of supply | | Part No. | Page |
| Battery 3 V button cell | | | |
| Test leads | | | |
| | | | |

CM-660 Digital clamp meter

















- Contactless voltage testing
- AMP TIPTM
- Data hold function for recording important measurement results
- Intelligent Automatic Power OFF (APO)
- Record mode for Max/Min/Average

| Display | LCD | | |
|----------------------------|-----------------------------|----------|------|
| Continuity test | yes | | |
| Voltage measurement | 0 V - 600 V AC/DC | | |
| Current measurement | 0.1 A - 600 A AC | | |
| Resistance | 0.1 Ω - 60 kΩ | | |
| Measuring category | CAT III 600 V, CAT IV 300 V | | |
| Jaw size | 30 mm | | |
| Item | | Part No. | |
| CM-660 Digital clamp meter | | 52066379 | |
| Scope of supply | | Part No. | Page |
| TSG-3 test leads | | 50120344 | |
| Battery 2 x 1.5 V AAA | | | |







CM-860 Digital clamp meter

















Characteristics

- Particularly suitable for measurements on frequency converters
- Measurement of alternating voltage and alternating current
- Illuminated display
- Longer battery life due to intelligent automatic power-off

| Technical data | | | |
|----------------------------|-----------------------------|----------|------|
| Display | LCD | | |
| Voltage measurement | 0 V - 600 V AC/DC | | |
| Current measurement | 0.1 A - 600 A AC | | |
| Resistance | 0.1 - 60 kΩ | | |
| Measuring category | CAT III 600 V, CAT IV 300 V | | |
| Jaw size | 30 mm | | |
| Item | | Part No. | |
| CM-860 Digital clamp meter | | 52066378 | |
| Scope of supply | | Part No. | Page |
| TSG-3 test leads | | 50120344 | |
| Battery 2 x 1.5 V AAA | | | |
| | | | |

CM-960 Digital clamp meter

















- Jaw opening 51 mm
- Current measurement AC/DC
- Easy-to-read backlit display for poor lighting conditions
- Peak hold and data hold function for recording measurement results
- Automatic range selection
- Relative zero point mode
- Use of bright conductor

| Technical data | | | |
|----------------------------|-----------------------------|----------|------|
| Display | LCD | | |
| Voltage measurement | 0 - 600 V AC/DC | | |
| Current measurement | 0 - 600 A AC/DC | | |
| Frequencymeasurement | 5 Hz - 999 Hz | | |
| Measuring category | CAT III 600 V, CAT IV 300 V | | |
| Jaw size | 35 mm | | |
| Item | | Part No. | |
| CM-960 Digital clamp meter | | 52066376 | |
| Scope of supply | | Part No. | Page |
| TSG-3 test leads | | 50120344 | |
| Battery 2 x 1.5 V AAA | | | |

CM-1360 Digital clamp meter

















Characteristics

- True RMS actual effective value for the most precise measurements
- Illumination of the measuring point
- Easy-to-read backlit display for poor lighting conditions
- Acoustic continuity check
- Longer battery life due to intelligent automatic power-off
- Data hold function for recording measurement results

| Technical data | | | |
|-------------------------------|--------------------------------------|----------|------|
| Display | LCD | | |
| Voltage measurement | 0 - 1,000 V AC/DC | | |
| Current measurement | 0 - 1,000 A AC/DC | | |
| Resistance | 0.1 - 60 kΩ | | |
| Measuring category | CAT III 1,000 V, CAT IV 600 V | | |
| Jaw size | 51 mm | | |
| Item | | Part No. | |
| CM-1360 Digital clamp meter | | 52066374 | |
| Scope of supply | | Part No. | Page |
| TSG-3 test leads | | 50120344 | |
| TC-30 Nylon carrying case for | measuring instruments with belt loop | 50075365 | 593 |
| Battery 2 x 1.5 V AAA | | | |

CM-1560 Digital clamp meter















- Jaw opening 51 mm
- True RMS actual effective value for the most precise measurements
- Particularly suitable for measurements on frequency converters
- Easy-to-read backlit display for poor lighting conditions
- Diode test
- Acoustic continuity check
- Illumination of the measuring point

| Technical data | | | |
|------------------------------|---|----------|------|
| Display | LCD | | |
| Voltage measurement | 0 - 1,000 V AC/DC | | |
| Current measurement | 0 - 1,000 A AC/DC | | |
| Frequencymeasurement | 5 Hz - 999 Hz | | |
| Measuring category | CAT III 1,000 V, CAT IV 600 V | | |
| Jaw size | 51 mm | | |
| Item | | Part No. | |
| CM-1560 Digital clamp mete | r | 52066372 | |
| Scope of supply | | Part No. | Page |
| TC-30 Nylon carrying case fo | or measuring instruments with belt loop | 50075365 | |
| TSG-3 test leads | | 50120344 | 593 |
| Battery 2 x 1.5 V AAA | | | |











TC-30 Nylon carrying case for measuring instruments with belt loop



- CM-1360 / CM-1560
- Voltage tester GT-55NE / GT-85NE





PREDICTABLE SAFETY: MEASURING DEVICES FOR THE MEDIUM AND HIGH VOLTAGE SECTORS

HDE stands for optimised safety. For over 75 years now, the company has tested and developed products for safe and efficient handling of medium and high voltages. Equipment and supply systems in the medium and high voltage sector can be tested accurately, safely and reliably with HDE products.



In brief

- V-Watch automatically warns of hazardous voltage
- ▶ Phase and voltage tester in one device
- ▶ Voltage display via audible and visual signal
- **▶** Suitable for catenary lines
- Simple operation

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▶ Watches over you: V-Watch

The V-Watch voltage detector from HDE warns of hazardous electrical voltages. The nearer you get to the hazard through electric flashovers, the greater the frequency of the optical and acoustic alarm. The warning signal is preset at a measurement of 4 kV at 2 m distance. The safe distances can also be set in the factory. The V-Watch increases your personal safety when working in environments exposed to electrical voltages.

- Contactless detection of electrical voltages and electrical fields from 2.4 kV AC
- Active even when not switched on
- Warning via optical and acoustic

- Warning becomes more intensive the closer the device gets to the voltage source
- Values can be individually set
- Presetting: 4 kV at 2 m







▶ Numerous functions, one device

The DVM-80 is phase tester and voltmeter in one. Replaceable measuring tips make it suitable for checking the phase balance of catenary lines and transformers. The measurements are easy to read on the large display and even from a few meters away.

- For direct and alternating voltages to 80 kV
- Background-lit display when working at low light levels
- Large display is easy to read even from a distance
- Replaceable measuring tips
- Determining the phase balance on catenary lines and transformers

▶ Measurements to 2000 A

The measuring ranges of the HVA-2000 are adequate for all medium and high voltages: 2000 A alternating current (25-500 Hz) at a voltage of 500 kV does not present a problem. The measurements are easy to read on the large display and even from a safe distance of up to 10 m. The last 4 measurements can be saved, and so the device does not have to be removed from the conductor to obtain each result.

- Current to 2000 A AC at 25-500 Hz
- Can be used to 500 kV
- Automatically saves the last 4 measurements
- Large, illuminated display for better legibility from a great distance
- Simple operation using the one-button principle
- Field of vision is always towards the user



DVM-80 Universal voltage/phase tester



- ▶ Combination voltage and phase tester with two measuring tips
- Suitable for open wires and earth cables

Characteristics

- Digital kilovolt display
- Digital with backlit display
- Display accuracy of 1 %
- Peak hold function

| Technical data | | | |
|----------------------------------|--------------------------------|---------------------------|------------|
| Frequency range | DC and AC up to 1000 H | Hz | |
| Dimension | Length 460 mm | | |
| Ambient temperature | -25 °C to +55 °C | | |
| Weight | 1.02 kg | | |
| Power supply system | 9 V battery | | |
| Voltage measurement | 5 V AC - 40 kV AC (5 V A | AC - 80 kV AC with add-on | resistors) |
| Measurement accuracy | 1 % / 2 % with add-on resistor | | |
| Item | | Part No. | |
| Universal voltage/phase tester | | DVM-80UVM/K65 | |
| Scope of supply | | Part No. | Quantity |
| Overhead Hook Probe | | 025-0LPS-5 | 2 |
| Contact measuring tips | | GCP-1 | 2 |
| Two-pole functional tester | | PT-5000B | 1 |
| Universal Hotstick Adapter (Shot | gun) | HSA-2500 | 2 |
| Robust carrying case | | B-12 | 1 |
| Battery 9 V | | | |

Digital voltage display sets to 100 kV or 500 kV



- ► Large bright LED display
- ▶ Suitable for open wires and earth cables

- Acoustic signal when voltage present
- Voltage display enables distinction between rated and induced voltages
- Measuring tips for busbars and earth cable



| Technical data | DVI100T50K02 | DVI-500K02 | |
|--|--|-----------------------|----------|
| Frequency range | 50 Hz | 50 Hz | |
| Dimension | 110 x 180 x 110 mm | 110 x 180 x 110 n | nm |
| Ambient temperature | -40 °C to +49 °C | -40 °C to +49 °C | |
| Weight | 0.62 kg | 0.62 kg | |
| Power supply system | 9 V battery | 9 V battery | |
| Voltage measurement | 100 V AC to 100 kV AC | 100 V AC to 500 kV | / AC |
| Measurement accuracy | 10 % | 10 % | |
| Item | | Part No. | |
| DVI-100 Digital voltmeter set | | DVI100T50K02 | |
| DVI-500 Digital voltmeter set | | DVI-500K02 | |
| Scope of supply | | Part No. | Quantity |
| Overale and Hands Bunker Engage | | | |
| Overhead Hook Probe, 5 cm D | iameter | HP-DVI-2 | 1 |
| Overhead Hook Probe, 15 cm | | HP-DVI-2 HP-DVI-6 | 1 1 |
| · · · · · · · · · · · · · · · · · · · | Diameter (only at 500 kV) | | <u>.</u> |
| Overhead Hook Probe, 15 cm | Diameter (only at 500 kV) 5, 25 and 35 kV Class | HP-DVI-6 | 1 |
| Overhead Hook Probe, 15 cm Underground Bushing Probe, 1 | Diameter (only at 500 kV) 5, 25 and 35 kV Class | HP-DVI-6 IEP-DVI-5 | 1 1 |









Contactless voltage detectors sets to 4, 69 or 500 kV



- ▶ Battery with 15 min. fast charging for a useful life of more than one day
- ▶ Voltage display via an audible and visual signal
- **▶** Suitable for open wires

Characteristics

- Detection distance of 25 cm
- Two insulated probe connections for insulated probes with universal coupling and hook insulated probes
- Detects voltages on angled test points

| Technical data | PRX4220P | PRX69D220P | PRX-500220P |
|---------------------|--------------------|----------------------|--------------------------|
| Frequency range | 50 Hz / 60 Hz | 50 Hz / 60 Hz | 50 Hz / 60 Hz |
| Dimension | 280 x 76 x 50 mm | 280 x 76 x 50 mm | 280 x 76 x 50 mm |
| Ambient temperature | -29 °C to +60 °C | -29 °C to +60 °C | -29° C to +60 °C |
| Weight | 0.31 kg | 0.31 kg | 0.31 kg |
| Power supply system | integrated battery | integrated battery | integrated battery |
| Voltage measurement | 50 V AC to 4 kV AC | 120 V AC to 69 kV AC | 120 V AC to 500 kV AC |

| Item | Part No. |
|--|-------------|
| PRX-4 Contactless voltage detector kit | PRX4220P |
| PRX-69 Contactless voltage detector kit | PRX69D220P |
| PRX-500 Contactless voltage detector kit | PRX-500220P |
| Scope of supply | Part No. |
| Carrying Holster with Belt Clip and Restraining Strap | PRX-HS |
| Charge Cord with 12 V DC Automotive Jack | PRX-Cord |
| 115 V AC transformer to plug PRX-CORD into 115 V AC - 240 V AC Wall outlet | PRX-XF |
| Carrying case | PRX-CS |

LV-5 Stray voltage detector



- ▶ Detects stray voltages from 5 V AC
- ▶ Robust waterproof housing
- ▶ Suitable for e.g. street lights, wooden power pylons, meter housings and much more.

- Especially light, durable LED
- Integrated tester in the belt pocket

| Technical data | | |
|-----------------------------|---------------------------------------|----------------|
| Frequency range | 50 Hz / 60 Hz | |
| Dimension | 188 x 40 x 30 mm | |
| Weight | 0.176 kg | |
| Power supply system | 9 V block battery for tester, 2 x 1.5 | V AA for LV-5 |
| Voltage measurement | 5 V AC up to 600 V AC, above 600 V | AC contactless |
| Item | | Part No. |
| LV-5 Stray voltage detector | | LV-5K01 |
| Scope of supply | | Part No. |
| Proof Tester for LV-5 | | LV-PT |
| Holster for LV-5 and LV-PT | | LV-HS |
| | | |



Test and measuring instruments for medium and high voltage

V-Watch personal voltage detector



- Warns the user from hazardous electrical voltages
- ▶ Contactless detection or electrical voltages and fields

Characteristics

- Alarm frequency increases the higher the voltage
- Audibly and optically increasing alarm frequency when approaching voltage-carrying plant components
- Warning distance at 4 kV AC is 2.13 m
- A customised warning distance can be factory-set if required
- Including carrying case for easy transportation

| Technical data | | |
|---------------------------------------|------------------------------|----------|
| Frequency range | 50 Hz / 60 Hz | |
| Dimension | 94 x 73 x 31 mm | |
| Ambient temperature | -29 °C to +49 °C | |
| Weight | 0.147 kg | |
| Power supply system | 9 V block battery for tester | |
| Voltage measurement | from 2.4 kV AC | |
| Item | | Part No. |
| V-Watch personal voltage detector | | VW-20HFR |
| Scope of supply | | Part No. |
| Flame Resistant Carrying Case Lanyard | | C-10FRVW |

TILT II Transformer tester



- Quick testing of transformers for short circuits and wire breaks
- ▶ Simple one-button operating concept

- Tests the primary and secondary sides of voltageless transformers
- An alarm tone is signalled when an error is detected
- Especially light LED
- 3 test results are displayed
- With automatic self-test
- Magnetic holder

| Technical data | | | |
|-------------------------------------|--|---------------------------|--|
| Short | ≤ 10 0hm | | |
| Open | ≥ 10 0hm | ≥ 10 0hm | |
| Transformator O.K. | Minimum inductance 800 μH | Minimum inductance 800 μH | |
| Kondensator O.K. | Minimum capacitance 0.5 μF, Maximum capacitance 300 μF | | |
| Dimension | 146 mm x 88 mm x 38 mm | | |
| Weight | 0.51 kg | | |
| Power supply system | 9 V battery for tester | | |
| Item | | Part No. | |
| TILT II Transformer tester TL-AST-M | | TL-AST-M | |
| Scope of supply | | Part No. | |
| Padded Carrying Bag | | B-8 | |









HVA-2000 Digital ammeter for high voltages



- ▶ Large bright display
- **▶** Fast measurement results
- ▶ Suitable for free conductors and earthing cables up to 7 cm diameter

Characteristics

- Easy to handle thanks to small and light design
- Saves the last 4 measured values

| Technical data | | |
|------------------------------|--------------------|----------|
| Frequency range | 25 bis 500 Hz | |
| Dimension | 100 x 170 x 290 mm | |
| Ambient temperature | -40 °C to +49 °C | |
| Weight | 0.8 kg | |
| Power supply system | 9 V battery | |
| Voltage measurement | 500 kV AC | |
| Current measurement | 2,000 A AC | |
| Measurement accuracy | 1 % | |
| Item | | Part No. |
| HVA-2000 Digital ammeter fo | or high voltages | HVA-2000 |
| Scope of supply | | Part No. |
| Rugged Plastic Carrying Case | 9 | CS-HVA |

IT-4 Insulation tester



- **▶** Detects invisible insulation defects
- ► Adjustable contact probes
- ▶ Suitable for all types of ceramic and porcelain insulators

- Easy to read thanks to LED display
- An audible signal is emitted in case of error
- Universal coupling for insulated probes
- Supplies fast, secure and reliable test results

| 5.111 |
|----------------|
| 5.111 |
| 2.18 |
| 5 111 |
| Part No. |
| IT-4220P |
| Part No. |
| 025-02035-SUB |
| 025-02040-SUB |
| 050-02025-220V |
| CS-IT4 |
| |



Test and measuring instruments for medium and high voltage

RT-200 Rope tester



- ▶ Continuous testing of any rope or tape lengths
- ▶ Suitable for ropes with a diameter of 0.95 cm to 3.8 cm

Characteristics

- Dielectric state is displayed via a green LED (good) or a red LED (poor)
- An acoustic signal is emitted when a faulty rope section is detected
- Compact and light design
- Integrated battery

| Technical data | | |
|---------------------------|--------------------------|----------------|
| Dimension | 190 mm x 235 mm x 220 mm | |
| Weight | 1.27 kg | |
| Power supply system | Rechargeable battery | |
| Item | | Part No. |
| RT-200 Rope tester | | RT-200220P |
| Scope of supply | | Part No. |
| 220 V AC Charging Adapter | | 050-02025-220V |

Insulated probes



- ▶ No rotating of the tester owed to universal toothed coupling
- ▶ Suitable for all voltage/current testers from HDE

- Telescopic insulated probes with universal toothed coupling
- Variable length of telescopic insulated probe
- Including retention hooks

| Item | Part No. |
|--|----------|
| Insulated probes, 1.2 m | 567-4 |
| Insulated probes, 1.8 m | 567-6 |
| Telescopic insulated probes, max. 6 m | HV-220 |
| Telescopic insulated probes, max. 10.6 m | HV-235 |









Watchman™





- Protect your employees by marking a safe work area or voltage-free work area
- Warns against hazardous voltages for lift cages and working platforms
- Can be used for construction machinery/vehicles to warn against medium and high voltage fields

Characteristics

- The Watchman[™] protects you and your personnel by drawing visual attention to medium and high voltage fields
- Includes self test to guarantee functionality
- When the Watchman[™] is switched on, the activity is displayed by a "Heartbeat" illuminated signal
- The strong neodymium magnet enables the detector to be installed on the auxiliary bracket or on any other magnetic surface

Suitable for

- Save the working area
- Protection for your carlift or manlift in the medium and high voltage area
- Protection for trucks and construction machines in the medium and high voltage area

Material

- ABS UL 94-HB

Additional information

 The batteries have a life of 2 years storage, 1,000 hours standby / "heartbeat" mode and 10 hours continuous voltage indication

| Watchman™ | | WM01 |
|---------------------|------------------------|----------|
| Article | | Part No. |
| Voltage measurement | > 2,400 AC | |
| Power supply system | 3 x AAA | |
| Diameter | 9.7 cm | |
| Weight | with battery: 0.227 kg | |
| Ambient temperature | -29 °C up to +49°C | |
| Dimension | height: 36 mm | |
| Frequency range | 50 Hz / 60 Hz | |
| Technical Data | | |

THERMAL MEASUREMENTS FROM A DISTANCE - TEMPERATURE GAUGES

Greenlee temperature gauges are ideal for preventive maintenance. Infra-red sensors measure without contact, even in confined areas. This allows the temperatures of motors and electrical connections to be measured and read from a safe distance. The measurements are used to identify fault sources in the electrical system.





▶ Accuracy counts

The TG-1000 can be used for temperatures from -60 $^{\circ}$ C to 550 $^{\circ}$ C. When the minimum and maximum values are entered, the user automatically receives an acoustic and optical warning signal if the values are overrun or underrun. Even from a distance of 1.2 m, the TG-1000 measures to an accuracy of 10 cm.

- Optimised measuring range for maintenance tasks
- Single laser for focussing on the measuring point
- Visual resolution 12:1 (measures from 1.2 m away at an accuracy of 10 cm)
- Acoustic and optical warning signal when set values for monitoring limit values are reached





▶ Double focus for the measuring range

The TG-2000 measures with more accuracy. It clearly marks your measuring range with the dual laser. The visual resolution of 16:1 ensures exact values. Even at a distance of 3.2 m, the temperatures of objects and conductors can be accurately measured to a range of 20 cm. As a result, the TG-2000 guarantees the optimum safe distance to the object being measured.

- Optimum measuring range for maintenance and fault analysis in electrical systems
- Dual laser for focussing on the measuring range
- Acoustic and optical warning signal when defined limit values are reached
- Connection point for thermocouple type K for temperature measurements with contact
- Emission ratio of all standard materials included in the operating instructions



Temperature measuring devices

TG-1000 Infrared thermometer



Characteristics

- Lower / upper limit values adjustable
- Display with background illumination for comfortable read-off in all work areas
- Temperature display selectable in Celsius (°C) or Fahrenheit (°F)
- Maximum/minimum temperature, difference and average measurements
- Twin laser for identification of the approximate diameters of the target measuring area
- Bush for type K thermocouple

Suitable for

· Preventative maintenance of switching devices, motors and electrical connections

| Technical data | | |
|------------------------------|----------------------|----------|
| Monitor | LCD | |
| Optical resolution | 12:1 | |
| Temperature measurement | -60 °C up to +550 °C | |
| Item | | Part No. |
| TG-1000 Infrared thermometer | | 52059365 |

TG-2000 Dual laser infrared thermometer



Characteristics

- Lower / upper limit values adjustable
- Display with background illumination for comfortable read-off in all work areas
- Temperature display selectable in Celsius (°C) or Fahrenheit (°F)
- Maximum/minimum temperature, difference and average measurements
- Twin laser for identification of the approximate diameters of the target measuring area
- Bush for type K thermocouple

Suitable for

Preventative maintenance of switching devices, motors and electrical connections

| Technical data | | |
|--------------------------------|----------------------|----------|
| Monitor | LCD | |
| Optical resolution | 16:1 | |
| Temperature measurement | -60 °C up to +625 °C | |
| Item | | Part No. |
| TG-2000 Dual laser infrared th | ermometer | 52059364 |

TPB Temperature probe for temperatures of -40 °C to +204 °C



| Technical data | | |
|---|-------------------------|----------|
| Sensor length | 1 m ±5 mm (39.4" ±0.2") | |
| Temperature measurement -40 °C up to +204 °C (-40 °F up to +399 °F) | | +399 °F) |
| Thermoelement Thermocouple type K | | |
| Item | | Part No. |
| TPB Temperature probe for temperatures of -40 °C to +204 °C | | 50075926 |









IDENTIFY CABLES AND CONDUCTORS WITHIN SECONDS

No time to loose when cables are connected incorrectly. Interruptions must be quickly rectified and cables and conductors must be correctly assigned. Greenlee cable and conductor identifiers provide the required data in the desired units in a matter of seconds. No time wasted with Greenlee.



In brief

- ▶ Evaluation in a matter of seconds
- ▶ Exact length determination from 5 m to 30 km
- ▶ Clear assignment of cables and conductors in the system



▶ The length gauge

No estimates, precise values for your inventory or stock taking. The CLM-1000E allows to you measure the exact length of the conductor or cable in a matter of seconds. From 5 m to 30 km, the gauge uses the material, the temperature and the cable thickness to measure the actual cable length.

- Measurements in a matter of seconds
- Measures cable and conductor lengths from 5 m to 30 km

- Suitable for copper and aluminium
- Suitable for AWG cross-sections and metric cross-sections
- Reliable measurements for stock taking and inventories
- Cables do not need to be cut to length
- No more time-consuming counting of cable coils required
- With pre-programmed settings



▶ The identifier

Identify the correct cable or the correct conductor right away with the Greenlee 701K-G. In systems without wiring diagrams or documentation, the wiring is assigned without a problem. Possible break points can de detected based on acoustic signals (warble tones).

- Identification of individual conductors or cables
- Adjustable warble tones for clear identification
- Range of up to 15 km
- Quickly locates break points
- Results within seconds



Classic Tone and Probe Kit 701K-G



Characteristics

- For identifying individual conductors or cables
- Tone generator with crocodile terminals and RJ-11 plug
- 3-colour LED display (identifies WS call voltages)
- Weather-resistant design
- Tone generator with interchangeable tips
- Selectable wobble tone
- Polarity test
- Continuity test

| Item Classic Tone and Probe Kit 701K-G | Part No. 52047869 |
|--|--------------------------|
| Scope of supply | Part No. |
| High-power sound generator 77HPCE | 52055781 |
| Inductive amplifier 200 EP-G | 52055782 |
| Bag | 50086839 |
| Battery 9 V | |

CLM-1000E cable length measuring device





- ▶ Saves time no cutting to length or counting the cable coils
- ▶ Reliable measuring results for inventory management

Characteristics

- To determine cable lengths
- Measurement range between 5 m 30 km
- Measurement range cross-section between 0.75 mm² 500 mm² and 18 Kcmill - 1000 Kcmill
- Backlit display
- Hold function
- 20 pre-programmable settings for stranded wires Cl. 2 (DIN EN 60228 Cl. 2): $0.75 - 35 \text{ mm}^2 = 7 \text{ stranded conductors}, 50 - 95 \text{ mm}^2 = 19 \text{ stranded conductors},$ $120 - 240 \text{ mm}^2 = 37 \text{ stranded conductors}, 300 - 500 \text{ mm}^2 = 61 \text{ stranded}$
- storage spaces for individual settings 8 storage spaces for individual settings
- Automatic shut-off
- Resistance measurements from 0.10 m Ω 1,999.999 Ω

Suitable for

- Copper and aluminium
- · Metric as well as UK and US units

| Item | Part No. |
|---|----------|
| CLM-1000E cable length measuring device | 52067352 |
| Scope of supply | Part No. |
| Calibration rod | 52067353 |
| KELVIN Klemmen / Messleitungen | 52067354 |
| Plastic case | |











Classic Tone and Probe Kit 801K/50



- Tone generator with crocodile terminals with pincushion and RJ-11 plug
- 3-colour LED display (identifies WS call voltages)
- Weather-resistant design
- Selectable wobble tone
- Continuity test
- Polarity test
- 50 Hz filter function

| Item | Part No. |
|------------------------------------|----------|
| Classic Tone and Probe Kit 801K/50 | 50604660 |
| Scope of supply | Part No. |
| 77HP-G/6A Tone generator | 52047489 |
| 200FP filter sensor | 50604678 |
| Bag | 50086839 |
| Battery 9 V | |

CONTINUOUSLY CONNECTED TO ONE ANOTHER - MEASURING GAUGES AND TESTERS FOR NETWORKS

Correct connections help to achieve non-interrupted communication. Greenlee measuring gauges and testers for networks test screened and non-screened conductors and immediately identify fault sources such as split pair faults, incorrect wiring, broken cables and short circuits. Even in poor light conditions, the measurements are clearly legible on the illuminated display. You rectify faults straight away.

In brief

- Measurements on screened and non-screened conductors possible
- Displays the fault position
- **▶** With NVP calibration
- **Easy to operate**





▶ NETcat Pro NC-500

The NC-500 tests not only for faults, it can also determine lengths of up to 600 m with the integrated TRD technology. For more accurate assignment, network devices can also be displayed in the environment and NVP calibrations can be performed. The NC-500 is therefore the optimal technical aid for correctly wiring and testing data cables.

- For screened and non-screened cables and conductors
- For split pair faults, incorrect wiring, short circuits and broken cables
- Length measurement up to 600 m with integrated TDR technology
- Easy to operate via touch screen
- Illuminated display for optimum legibility
- Displays active network devices (PC and hub)

- NVP calibration for optimum transmission speed
- Robust design suitable for industrial environment
- Selectable sound signals for cable identification



▶ For correct network connections: NETcat Pro NC-100

Check networks for correct cable connections in a few steps. Simply insert the cable into the device and the test receiver and select the cable type. The test result is displayed immediately and you can see at a glance which point has to be corrected.

- For screened and non-screened cables and conductors
- For split pair faults, incorrect wiring, short circuits and broken cables

- For twisted pair conductors with RJ-45 and RJ-11 plugs or coaxial cable with type F connection
- Easy to operate
- Readily legible thanks to illuminated display
- In conjunction with the 200 E-P inductive amplifier, cables can also be located and identified





Network measuring devices and testers

NETcat® Micro NC-100 is a wiring tester for testing data, voice and video cables



Characteristics

- Built-in tone generator
- Testing of twisted pair (UTP, STP) and coaxial cables
- Locating short-circuits, breaks, incorrect wiring and split pair errors
- Surge warning feature
- Digital, backlit display
- Telephone (RJ-12), LAN (RJ-45) and coaxial connector (F type) ports
- Integrated remote unit
- Three selectable sound signals for cable identification

| Item | Part No. | |
|---|----------|------|
| NETcat® Micro NC-100 | 52024541 | |
| Scope of supply | Part No. | Page |
| Twisted pair, coax and crocodile clips/connecting cable | | |
| Battery | | |

NETcat® Micro NC-100 in combination with inductive receiver 200EP for cable identification



Characteristics

- Telephone (RJ-12), LAN (RJ-45) and coaxial connector (F type) ports
- Integrated remote unit
- Three selectable sound signals for cable identification
- Testing of twisted pair (UTP, STP) and coaxial cables
- Locating short-circuits, breaks, incorrect wiring and split pair errors

| Item NETcat® Micro NC-100 + 200EP | Part No. | |
|-----------------------------------|----------|------|
| Scope of supply | Part No. | Page |
| NETcat® Micro NC-100 | 52024541 | 612 |
| Inductive amplifier 200 EP | 52055782 | |
| Test leads | | |
| Battery | | |

NETcat® Pro NC-500, wiring and network service tester with TDR function



- Length measurement using TDR function up to 600 m
- Four selectable tone signals for cable identification
- Displays active network devices (PC or hub) in 10/100 Base-T networks
- NVP calibration
- ID detection of up to eight remote units with optional NC-510 accessory kit
- Testing of twisted pair (UTP, STP) and coaxial cables
- Locating short-circuits, breaks, incorrect wiring and split pair errors

| Item | Part No. | |
|---|----------|------|
| NETcat® Pro NC-500 | 52024556 | |
| Scope of supply | Part No. | Page |
| Twisted pair, coax and crocodile clips/connecting cable | | |
| Battery | | |





