



Thank you for purchasing our equipment. Please read this manual carefully and heed the safety warnings and instructions before installing, using or repairing the equipment. This will ensure not only the protection of persons, but also the long life of the equipment

TECHNICAL PARAMETERS

Range: DC voltage	600V (±1.0% + 5 digits)
Scope: AC Voltage (True-RMS)	600V (±1.2% + 8 digits)
Scope: AC current	20A - 200A (±2.5% + 10 digits)
Range: resistance	20kΩ (±1.5% + 5 digits)
Display	LCD, max value display 2000
	- /
Data Hold function	Holding the current value on the display
Data Hold function Operating temperature	, , ,

This manual contains all safety information, operating instructions, specifications and maintenance of the compact, handheld and battery-operated measuring instrument.

The instrument of this series performs AC/DC voltage, AC current, resistance, circuit continuity test, diode test, display has 3 1/2 digits parameters, maximum display 2000.

The device has polarity indication, data hold, over range indication and auto shutdown functions. It is easy to operate and is an ideal instrument. The DT200 series digital clamp multimeter has been designed to EN61010-1 for electronic measuring instruments with overvoltage category (CAT II 600 V) and pollution degree 2.

SAFETY NOTICE

- Check the housing before using the meter. Do not use the meter if it is damaged or if the case (or part of it) is damaged/removed. Look for cracks or missing plastic. Pay attention to the insulation around the connectors.
- 2. Check the measuring wires for damaged insulation or bare metal. Check the continuity of the test leads.
- 3. Do not apply a voltage higher than the rated voltage marked on the meter between the terminals or between any terminal and ground.
- 4. The rotary switch should be placed in the correct position and no range change should be made during measurement to avoid damage to the equipment.
- 5. If the equipment operates with an effective voltage higher than 60 V DC or 36 V AC effective, special care must be taken as there is a risk of electric shock.
- 6. Use the correct clamp, function and range for measurement.
- 7. Do not use or store the device in an environment with high temperature, humidity, explosive, flammable or strong magnetic fields. The performance of the device may deteriorate when wet.
- 8. Keep your fingers behind the finger protectors when using the measuring cables.
- 9. Before testing resistance, continuity, or diodes, disconnect power to the circuit and discharge all high-voltage capacitors.
- 10. Replace the battery as soon as the battery indicator appears. With a dead battery, the meter may show false readings that can lead to electric shock and personal injury.
- 11. Before opening the device case, disconnect the connection between the test leads and the circuit under test and turn off the power to the meter.
- 12. When servicing the equipment, use only replacement parts with the same model number or identical electrical specifications.
- 13. The internal circuit of the meter must not be changed arbitrarily to avoid damage to the equipment and accident.
- 14. When maintaining the Meter, a soft cloth and mild detergent should be used to clean its surface. No abrasives or solvents should be used to prevent corrosion, damage and accident to the meter surface.
- 15. The meter is suitable for indoor use.
- 16. Turn off the power when not in use and remove the battery when not in use for a long period of time. Keep checking the battery as it may leak with prolonged use, replace the battery as soon as a leak is detected. A leaking battery will damage the meter.

CHARACTERISTICS

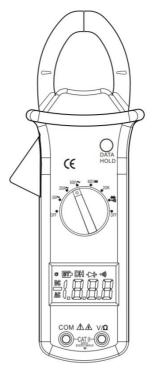
Display: LCD, 2000 values, 2/sec update
Polarity indication: '-' is displayed automatically
Over range indication: "OL" is displayed.
Low battery indication: displayed

Operating temperature: 0°C to 40°C, less than 80%RH Storage temperature: -10°C to 50°C, less than 85%RH

Battery type: 1.5 V x 2, AAA size Dimensions: $195 \times 35 \times 70$ mm

Weight: approximately 172 g (including battery)

The device automatically switches off after 15 minutes of inactivity (with an acoustic warning before switching off).



DESCRIPTION OF SYMBOLS

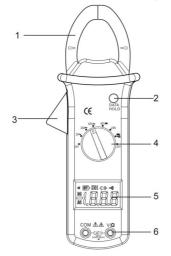
DC AC DC on DC

□ DC or AC
 △ Security Alerts

Conforms to the European Union Directive

Double insulation

DESCRIPTION OF EQUIPMENT



- Transformer jaws
- 2. Hold button storage of measured data
- 3. Trigger
- 4. Function and range switch
- 5. LCD display
- 6. Input connector

DC Voltage

Range	Resolution	Accuracy
600V	1V	±(1.0% of rdg +5 digits)

Input impedance: $10M\Omega$

Overload protection: 600V DC/AC rms

Max. Input voltage: 600V DC

AC Current

Range	Resolution	Accuracy
20A	1mA	±/2 F0/ of ada + 10 dicite)
200A	10mA	\pm (2.5% of rdg + 10 digits)

Measurement voltage drop: 200 mV

Frequency range: 50/60Hz

AC Voltage

Range	Resolution	Accuracy
600V	1V	\pm (1.2% of rdg + 8 digits)

Input impedance: $10M\Omega$ Frequency range: 50Hz/60HzOverload protection: 600V DC/AC rms

Response: 2.5 V: Average value, calibrated in sine wave rms

Max. Input voltage: 600V AC rms

Resistance

Range	Resolution	Accuracy
20ΚΩ	10Ω	±(1.5% of rdg + 5 digits)

Open circuit voltage: approximately 1.0 V Overload protection: 250V DC/AC rms

Continuity

Scope	Resolution	Accuracy
•)))	The built-in buzzer sounds when the resistance is less than approximately 50Ω .	Open circuit voltage: approximately 2.5 V

Overload protection: 250V DC/AC rms

CONTROL

Voltage measurement

- 1. Connect the BLACK measuring lead to the "COM" connector and the RED to the " $V\Omega$ " connector.
- 2. Set the function/range switch to the desired range $V \sim$ or . V = 0
- 3. Connect the measuring leads through the measured source or load.
- 4. When measuring DC current, the polarity of the red wire connection is displayed.

To avoid damage to the measuring instrument, do not measure voltages that exceed 600Vdc or 600Vac.

AC Current Measurement

- 1. Set the function/range switch to a range of 200A ∼. If one or more zeros appear on the display, reduce to a lower range to improve the measurement resolution
- 2. Press the switch to open the transformer jaws and clamp only one wire, it is not possible to make measurements if two or three wires are clamped at the same time.
- 3. The reading on the display is the AC current flow through the conductor.

Resistance measurement

- 1. Connect the BLACK test lead to the "COM" connector and the RED test lead to the "V Ω " connector (Note: The polarity of the RED test lead is positive "+").
- 2. Set the function/range switch to the 20 K Ω range.
- 3. Connect the measuring leads across the load to be measured.
- 4. The data is displayed on the display

Remark:

- 1. If the input is not connected, i.e. in a disconnected circuit, the "OL" symbol is displayed as an overrange indicator.
- 2. Before measuring the resistance in the circuit, make sure that the circuit under test has all power disconnected and all capacitors are fully discharged.

Continuity test

- 1. Connect the BLACK test lead to the "COM" connector and the RED test lead to the "V Ω " connector. (Note: The polarity of the RED test lead is positive "+").
- 2. Set the function/range switch to → , "OL" will be displayed on the LCD.
- 3. Connect the measuring leads across the load to be measured.
- 4. If the circuit resistance is less than approximately 50Ω , the built-in buzzer sounds.

Diode test

- 1. Connect the BLACK test lead to the "COM" connector and the RED test lead to the " $V\Omega$ " connector. (Note: The polarity of the RED test lead is positive "+").
- 2. Set the function/range switch to → , "OL" will appear on the LCD display.
- 3. Connect the red measuring lead to the anode of the diode to be measured and the black measuring lead to the cathode.
- 4. The voltage drop in the direct direction in mV is displayed. If the diode is reversed, "OL" is displayed.

Data hold

1. Press the "HOLD" button while measuring, the data is held and "H" is displayed. The data will be restored only after pressing this button again. Then the "H" disappears and the data hold state is terminated.

Battery Replacement & Auto Shutdown

- 1. Leave the device for 15 minutes without operation to switch off automatically. An audible warning will sound before the unit automatically shuts off.
- 2. If appears on the LCD screen, it means the battery needs to be replaced. Unscrew the screws and open the back cover, replace the dead battery with a new battery (size AAA, 1.5V x 2).

The product has been issued with a CE declaration of conformity in accordance with the applicable regulations. On request from the manufacturer: info@solight.cz, or downloadable from www.solight.cz/en.



