Advanced Industrial Multimeter
CMM-60

CAT III
1000 V

CAT IV
600 V

IP67

BLUETOOTH

RECORDER

The automatic holding of the measurement result while working with both hands is now possible thanks to the AutoHold function

Measurements of the current loop 4-20 mA in analogue circuits controlling temperature, pressure, humidity or flow sensors are possible thanks to the special function that displays the percentage results for the corresponding current values

The meter allows the measurement of very small currents in the range of 500 µA, useful during service works, e.g. in tests of real-time clock support systems or in the maintenance of flame sensors in combustion chambers

Thanks to the dedicated "CMM-60 Multimeter Software", it is possible to transfer results from the meter's memory to a computer program and analyse these results further

Visibility in all conditions and reading at a wide angle are possible thanks to the colour display with a resolution of 320 x 240 pixels and a diagonal of 3.5"
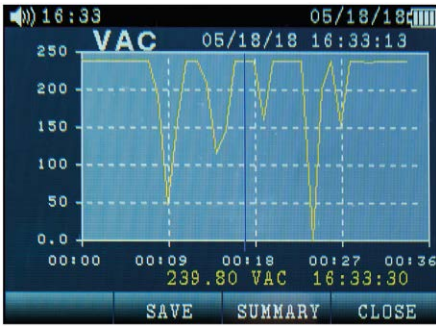
Operating the meter in thick gloves during industrial measurements will not be a problem thanks to the specially designed rotary switch
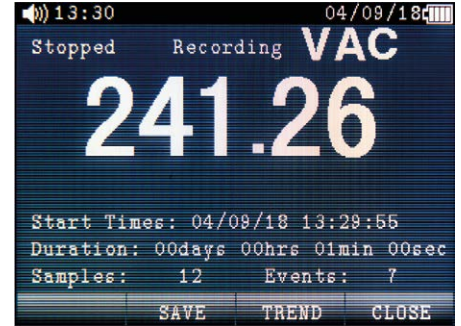
Trends function

The possibility of presenting measurement results of the recorder in the graphical form of the trend - the Trend Capture function

MAX / MIN / AVG functions

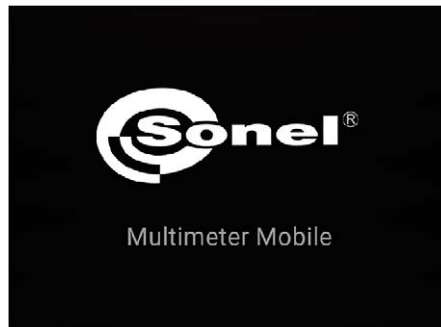Recording of the minimum and maximum values and calculation of the current measurements' average

Recording

Possibility of quick detection of irregularities by recording up to 10,000 measurement results

AC + DC function

The possibility of measuring the DC and AC component as the function of voltage measurement

Bluetooth communication

The possibility of sending measurement results in real time on mobile devices with Android system and to the computer application "CMM-60 Multimeter Software"

Low-pass filter

Accurate voltage measurement while eliminating high-frequency interference generated by the operation of electronic machines and devices

Furthermore

- over 14 measurement functions, including AC / DC voltage measurement, AC / DC current measurement, resistance, capacity, temperature, pulse width, fill factor, frequency
- True RMS for AC voltage and current allows to measure the effective value of distorted waveforms
- saving the results of fast 1 ms waveforms thanks to the PEAK value measurement function
- the relative REL measurement function allows, among others, elimination of resistance values of test leads
- real-time clock that allows adding date and time of a measurement to each sample
- HELP function to quickly explain the meaning of a given measuring function and buttons
- protection against water flooding and penetration of dust into the electronic system due to the extremely robust housing with IP67 protection level
- dedicated lithium-polymer battery allowing for long-term operation of the device
- a dedicated charger and power supply for charging the battery without removing it included in the set

Technical specifications

Measurement functions	Range	Resolution	Accuracy ±(% m.v. + digits)
DC voltage	50 mV / 500 mV / 5 V / 50 V / 500 V / 1000 V	from 0.001 mV	from ±(0.025% m.v.+ 5 digits)
AC voltage (TRMS)	50 mV / 500 mV / 5 V / 50 V / 500 V / 1000 V	from 0.001 mV	from ±(0.3% m.v. + 25 digits)
DC current	500 µA / 5000 µA / 50 mA / 500 mA / 10 A	from 0.01 µA	from ±(0.1% m.v.+ 20 digits)
AC current (TRMS)	500 µA / 5000 µA / 50 mA / 500 mA /10 A	from 0.01 µA	from ±(0.6% m.v. + 25 digits)
Resistance	50 Ω / 500 Ω / 5 kΩ / 50 kΩ / 500 kΩ / 5 MΩ / 50 MΩ	from 0.001 Ω	from ±(0.05% m.v. + 10 digits)
Capacity	5 nF / 50 nF / 500 nF / 5 µF / 50 µF / 500 µF / 10 mF	from 0.001 nF	from ±(2% m.v. + 40 digits)
Frequency	50 Hz / 500 Hz / 5 kHz / 50 kHz / 500 kHz / 5 MHz / 10 MHz	from 0.001 Hz	±(0.01% m.v.+ 10 digits)
Duty cycle	0.10...99.90%	0.01%	±(1.2% m.v.+ 2 digits)
4-20 mA% current measurement	-25.00...125.00%	0.01%	±50 digits
Temperature measurement (°C)	-50.0...+1000.0°C	0.1°C	±(1.0% m.v. + 2.5°C)
Temperature measurement (°F)	-58.0...+1832.0°F	0.1°F	±(1.0% m.v. + 4.5°F)

Basic features

Counting	50.000 digits
Automatic range selection	✓
Manual range selection	✓
The HOLD function	✓
Relative measurement	✓
MAX / MIN / AVG measurement	✓
Beeper - continuity buzzer	✓
Diode test	✓

Advanced features

TRMS measurement	✓
Frequency band for TRMS	10000 Hz
AC + DC measurement	✓
Low-pass filter	✓
dBV / dBm measurement	✓
Peak HOLD function	✓
Bluetooth communication	✓
Device memory	2000
Recording memory	10000
Trend Capture function	✓
Date and time of measurement	✓

Other features

Battery indicator	✓
Automatic shutdown function	✓
Rechargeable battery	✓
Type of display	3.5" color TFT LCD 320 x 240 pixels

Safety and conditions of use

Measurement category (EN 61010)	CAT IV 600 V / CAT III 1000 V
Protection Level	IP67
Internal impedance	about 10 MΩ
External dimensions	220 x 97 x 58 mm	8.7" x 3.8" x 2.3"
Weight	342 g	0.8 lbs
Working temperature range	+5...+40°C	41...104°F
Storage temperature range	-20...+60°C	-4...140°F
Humidity	up to 80% at 31°C, with linear slope to 50% at 40°C

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Standard accessories

Test leads set for CMM (CAT IV, M)

WAPRZCMM2

Temperature measurement

probe (type K, metal) WASONTEMK2

adapter WAADATEMK

2x plugs for measuring sockets

Factory calibration certificate

Battery charging

power supply WAZASZ21

adapter for power supply WAADALAD1

Li-Poly 7,4 V 2,4 Ah battery for CMM-60

WAAKU25

CMM-RR radio receiver for CMM-60

WAADACMMRR

Optional accessories

Set of test leads for CMM

for CMM/CMP WAPRZCMP1

CAT IV, S WAPRZCMM1

Temperature measurement

probe (type K, bayonet) WASONTEMP

probe (type K) WASONTEMK

Crocodile clip mini, 1 kV 10 A (set)

WAKROKPL10MINI

Calibration certificate with accreditation

Universal magnetic hanging strap

WAPOZUCH6

M1 hanging hook straps

WAPOZUCH1

M13 carrying case

WAFUTM13

Check other meters from the CMM family

Sonel CMM-10
- intuitive
- clear reading
- safe and economical
- the basic measuring device

Sonel CMM-11
- durable
- versatile
- pocket
- for every electrician

Sonel CMM-30
- accurate
- handy
- broadened functionality
- for the industry

Sonel CMM-60
- ultra-durable
- multi-purpose
- for special applications
- advanced troubleshooting