



The automatic holding of the measurement result while

working with both hands

is now possible thanks to the AutoHold function

CMM-60

index: WMXXCMM60

CAT III

1000 V

CAT IV

600









05/18/18**(III** 100 SUMMARY True RMS Multimeter MAX MIN IP67



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





Measurements of the current loop

4-20 mA in analogue circuits con-

trolling temperature, pressure, hu-

midity 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

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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

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Technical specificati	ions —		
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)	$500~\mu A$ / $5000~\mu A$ / $50~mA$ / $500~mA$ /10 A	from 0.01 μA	from ±(0.6% m.v. + 25 digits)
Resistance	$50~\Omega$ / $500~\Omega$ / $5~k\Omega$ / $50~k\Omega$ / $500~k\Omega$ / $5~M\Omega$ / $50~M\Omega$	from 0.001 Ω	from ±(0.05% m.v. + 10 digits
Capacity	5 nF / 50 nF / 500 nF / 5 μ F/ 50 μ F / 500 μ F / 10 mF	from 0.001 nF	from ±(2% m.v. + 40 digits)
Frequency	50Hz/500Hz/5kHz/50kHz/500kHz/5MHz/10MHz	from 0.001 Hz	±(0.01% m.v.+ 10 digits)
Duty cycle	0.1099.90%	0.01%	±(1.2% m.v.+ 2 digits)
4-20 mA% current measurement	-25.00125.00%	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		
Weight	342 g		
Working temperature range	+5+40°C		
Storage temperature range	-20+60°C		
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



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



Calibration certificate



User manual

Additional 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)

WAKROKPL10MNI



M1 hanging hook straps

WAPOZUCH1



M10 carrying case

WAFUTM10



Calibration certificate issued by an accredited laboratory

LSWGBCMM60

Check other meters from the CMM family



Sonel CMM-10 WMXXCMM10

- intuitive
- clear reading
- safe and economical · the basic measuring device



Sonel CMM-11 WMXXCMM11

- durable
- versatile
- · for every electrician



Sonel CMM-30 WMXXCMM30

- accurate
- handy broadened functionality
- for the industry



Sonel CMM-60 WMXXCMM60

- ultra-durable
- multi-purpose for special applications
- advanced troubleshooting

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