# Digital multimeters MD 9050 TRMS Heavy duty industrial multimeter



The MD 9050 ranks among the best multimeters on the market. High resolution and accuracy, 2-line LCD display, fast data acquisition and transfer (via optical interface), CAT IV / 1000 V, TRMS current and voltage measurement, non-contact voltage detection, conductance measurement, auto check function and fast one-handed operation are highlights of the multimeter. The MD 9050 is the ideal choice for demanding measurement tasks in industry, in the laboratories and in everyday repair and maintenance practice.

# MEASURING FUNCTIONS

- TRMS AC, DC voltage measurement;
- TRMS AC, DC current measurement;
- Capacitance measurement;
- Resistance measurement;
- Diode test;
- Mains supply frequency measurement;
- Frequency of digital signals measurement;
- Continuity test (acoustic signalling);
- Conductance measurement;
- Electric field detection;
- Temperature measurement.

# KEY FEATURES

- **TRMS:** accurate readings on sinusoidal and non-sinusoidal signals.
- Autocheck function: automatic detection of AC voltage, DC voltage or resistance.
- Auto-ranging: user can switch between auto and manual ranging.

- **Temperature measurement:** measures T1, T2 and T1 + T2 temperature in Celsius and in Fahrenheit.
- **EF detection**: non-contact and probe-contact electric field detection.
- Lead alert: incorrect lead connection alert.
- Relative zero mode: relative function for comparing the difference between signals or removing background noise.
- MAX/MIN/AVG: recording of maximum, minimum and average values.
- Data Hold: data hold feature freezes the display for later view.
- **Peak Hold:** Crest (instantaneous peak) cupture mode.
- **PC Link:** test results can be downloaded to the computer via the optional PC software.
- **Safety:** CAT IV / 1000 V overvoltage protection.
- **Backlight:** large bright 4 digits 9999 counts dual LCD display with backlight for working in dark conditions.

# APPLICATION

- High level industrial testing;
- High level electronic fault finding;
- Field servicing;
- Heavy duty electrical testing.



FUNCTION	Range	Accuracy
TRMS AC and AC+DC voltage (40 Hz 20 kHz)	60.00 mV 999.9 V	from ±(0.5 % of reading + 3 digits) to ±(3.0 % of reading + 4 digits)
Autocheck (ACV)	9.999 V 999.9 V	±(1.0 % of reading + 4 digits)
DC voltage	60.00 mV 999.9 V	from ±(0.06 % of reading + 2 digits) to ±(0.12 % of reading + 2 digits)
Autocheck (DCV)	9.999 V 999.9 V	± (0.5 % of reading + 3 digits)
DC current	600.0 μA 10.00 A	±(0.2 % of reading + 4 digits)
TRMS AC and AC+DC current (40 Hz 1 kHz)	600.0 μA 10.00 A	from ±(0.6 % of reading + 3 digits) to ±(1.0 % of reading + 4 digits)
Diode test	2.000 V	±(1.0 % of reading + 1 digit)
	Open-circuit voltage <3.5 VDC, test current 0.4 mA	
Resistance	600.0 Ω 60.00 ΜΩ	from ±(0.1 % of reading + 3 digits) to ±(1.5 % of reading + 5 digits)
Conductance	99.99 nS	±(0.8 % of reading + 10 digits)
Autocheck (resistance)	600.0 Ω 60.00 ΜΩ	from ± (0,5 % of reading + 4 digits) to ±(2 % of reading + 5 digits)
Mains frequency	15.00 Hz 50.00 kHz	±(0.04 % of reading + 4 digits)
Frequency of digital equipment	5.00 Hz 1.000 MHz	$\pm$ (0.004 % of reading + 4 digits)
Capacitance	60.00 nF 25.00 mF	from ±(0.8 % of reading + 3 digits) to ±(6.5 % of reading + 5 digits)
Temperature	-50 °C +1000 °C	±(0.3 % of reading +2 °C)
Power supply	9 V battery (NEDA1604G, JIS006P, or IEC6F22)	
Overvoltage category	CAT IV / 1000 V	
Dimensions	208 x 103 x 64.5 mm	
Weight	635 g	

### ORDERING INFORMATION



### Standard set MD 9050

- MD 9050 TRMS Heavy duty industrial MD 9026 Test lead with probe (red,
- AMD 3020 rest read with proce (rea, black), 2 pcs
  AMD 9023 Thermocouple probe, type K
- 9V battery
- Instruction manual
- Calibration certificate

## **OPTIONAL ACCESSORIES**



## METREL d.o.o.

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