

## MD 9050 TRMS Heavy Duty Industrial Digital 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.
- Diod 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) capture 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.

### STANDARD SET:

- Multimeter MD 9050 with rubber holster
- Test lead with probe, 2 pcs
- Thermocouple probe, type K
- 9 V battery
- Instruction manual
- Warranty



### TECHNICAL SPECIFICATION:

Function	Range	Accuracy
TRMS AC and AC+DC voltage (40 Hz ... 20 kHz)	60.00 mV ... 999.9 V	from $\pm(0.5\%$ of reading + 3 digits) to $\pm(3.0\%$ of reading + 4 digits)
Autocheck (ACV)	9.999 V ... 999.9 V	$\pm(1.0\%$ of reading + 4 digits)
DC voltage	60.00 mV ... 999.9 V	from $\pm(0.06\%$ of reading + 2 digits) to $\pm(0.12\%$ of reading + 2 digits)
Autocheck (DCV)	9.999 V ... 999.9 V	$\pm(0.5\%$ of reading + 3 digits)
DC current	600.0 $\mu$ A ... 10.00 A	$\pm(0.2\%$ of reading + 4 digits)
TRMS AC and AC+DC current (40 Hz ... 1 kHz)	600.0 $\mu$ A ... 10.00 A	from $\pm(0.6\%$ of reading + 3 digits) to $\pm(1.0\%$ of reading + 4 digits)
Diode test	2.000 V	$\pm(1.0\%$ of reading + 1 digit)
Resistance	600.0 $\Omega$ ... 60.00 M $\Omega$	Open-circuit voltage $< 3.5$ V <sub>DC</sub> , test current 0.4 mA from $\pm(0.1\%$ of reading + 3 digits) to $\pm(1.5\%$ of reading + 5 digits)
Conductance	99.99 nS	$\pm(0.8\%$ of reading + 10 digits)
Autocheck (resistance)	600.0 $\Omega$ ... 60.00 M $\Omega$	from $\pm(0.5\%$ of reading + 4 digits) to $\pm(2\%$ of reading + 5 digits)
Mains frequency	15.00 Hz ... 50.00 kHz	$\pm(0.04\%$ 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 $\pm(0.8\%$ of reading + 3 digits) to $\pm(6.5\%$ of reading + 5 digits)
Temperature	-50 $^{\circ}$ C ... +1000 $^{\circ}$ C	$\pm(0.3\%$ of reading + 2 $^{\circ}$ 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	