

General Purpose Multimeters



Technical Data

MT1879

The MT1879 DM is a 4000 count auto ranging multimeter, with manual override. This meters offers a great feature of measuring frequency on AC voltage and current with the range of 50Hz to 400Hz. The large LCD display with clear range annunciations and backlight ensure that readings are easy to read under all circumstances. This meter ensures that if the rotary switch is turned in any direction whilst signals less than 1000V AC/DC are input into the meter, the meter will not be damaged. It is even protected against measuring voltage if the knob is set on the ohms range accidentally. This meter is perfect for technicians in maintenance, facility maintenance, installation and production equipment maintenance.

Features Include:

- IP67 Dust & waterproof with O-ring sealed casing
- When AC voltage measured, LCD turns red to indicate presence of voltage
- Non contact voltage detector, LCD turns red
- Auto range with manual override
- Temperature between 20 °C to 760 °C
- Measures frequency range on electronic and electrical circuits
- Capacitance to 200µF
- Measures AC and DC voltage to 1000V
- Relative mode
- Data hold
- NCV detection above 110V AC
- Duty cycle
- Measures resistance up to 40MΩ
- 4000 Count LCD
- Full ranges protection
- Auto power off
- Overmould rubber housing
- Integrated test lead holder
- Blue backlight for dimly lit areas

General Specifications

Insulation	: Class2, Double insulation.
Over voltage category	: CATIV 600V, CATIII 1000V
Surge Protection	: 8kV peak IEC 61010
Display	: 4000 counts LCD display, 21mm high
Polarity	: Automatic, (-) negative polarity indication
Over-range	: "OL" mark indication
Low battery indication	: a battery symbol is displayed when the battery voltage drops below the operating level .
Measurement rate	: 2 times per second nominal.
Auto power off	: Meter automatically shuts down after approx. 30 minutes of inactivity.
Operating environment	: -10°C to 50 °C (14 °F to 122 °F) at < 70 % relative humidity.
Storage temperature	: -30°C to 60 °C (-4 °F to 140 °F) at < 80 % relative humidity.
Relative humidity	: 90% (0°C to 30°C); 75% (30°C to 40°C); 45% (40°C to 50°C);
For inside use, max height	: Operating: 3000m, Storage 10,000m
Pollution degree	: 2
Safety	: The instrument complies with IEC/EN 61010-1:2001 and IEC/EN 61010-031:2002
Power	: One 9V battery, NEDA 1604, IEC 6F22.
Dimensions	: 182 (H) x 82 (W) x55 (D) mm
Weight	: Approx.: 375g.
Accuracy	: Accuracy is given at 18 °C to 28 °C (65 °F to 83 °F), less than 70 % RH



Measurement	Range	Resolution	Accuracy
DC Voltage (Auto-ranging)	400.0mV	0.1mV	± 0.8% of rdg ± 2 dgts
	4.000V	1mV	
	40.00V	10mV	
	400.0V	100mV	
	1000V	1V	± 1% of rdg ± 2 dgts
AC Voltage (Auto-ranging)	400.0mV	0.1mV	± 1.0% of rdg ± 3 dgts
	4.000V	1mV	
	40.00V	10mV	
	400.0V	100mV	
	1000V	1V	± 1.2% of rdg ± 5 dgts
DC Current (Auto-ranging)	400.0µA	0.1µA	± 1.2% of rdg ± 3 dgts
	4000µA	1µA	
	40.00mA	10µA	
	400.00mA	100µA	
	10A	10mA	± 2.5% of rdg ± 3 dgts
AC Current (Auto-ranging)	400.0µA	0.1µA	± 1.5% of rdg ± 5 dgts
	4000µA	1µA	
	40.00mA	10µA	
	400.0mA	100µA	
	10A	10mA	± 3.0% of rdg ± 5 dgts
Resistance (Auto-ranging)	400.0Ω	0.1Ω	± 0.8% of rdg ± 5 dgts
	4.000kΩ	1Ω	± 0.8% of rdg ± 2 dgts
	40.00kΩ	10Ω	
	400.0kΩ	100Ω	
	4.000MΩ	1kΩ	± 2.5% of rdg ± 8 dgts
	40.00MΩ	10kΩ	
Capacitance (Auto-ranging)	40.00nF	10pF	± 5.0% of rdg ± 7 dgts
	400.0nF	0.1nF	± 3.0% of rdg ± 5 dgts
	4.000µF	1nF	
	40.00µF	10nF	
	100.0µF	0.1µF	± 5.0% of rdg ± 7 dgts
Frequency (Auto-ranging)	5.000Hz	0.001Hz	± 1.0% of rdg ± 3 dgts
	50.00Hz	0.01Hz	
	500.0Hz	0.1Hz	
	5.000KHz	1Hz	
	50.00kHz	10Hz	
	500.0kHz	100Hz	
	5.00MHz	1kHz	± 1.2% of rdg ± 4 dgts
Duty Cycle	0.1 ~ 99.9%	0.1%	± 1.2% of rdg ± 2 dgts
Temperature	20°C ~ +760°C	1°C	± 3% of rdg ± 5 dgts
	-4°F ~ +1400°F	1°F	± 3% of rdg ± 8 dgts
Measurement	Test current	Resolution	Accuracy
Diode Test	1Ma	1mV	± 10% of rdg ± 5 digits
	typical / open		
	MAX. 3V		