



## MDM-8145A/MDM-8146A Benchtop Digital Multimeter

- 4½ digits, 22000 counts.
- Dual parameter display: display two parameters of the same input signal.
- Measurement rate: FAST (7 times / sec), MID (5 times / sec), SLOW (2 times / sec).

- Trigger mode: Automatic trigger, single trigger, external trigger(optional).
- Range switching mode: Auto / Manual.
- 12 basic measurement functions: AC and DC voltage, AC and DC current, two-wire / four-wire resistance, period / frequency, diode, on-off test, capacitance, duty cycle.
- DCV basic accuracy: 0.05%.
- Mathematical functions: MX+B/MAX/MIN/dB/dBm/Rel/Comp Hi/Comp Low/ Statistics.
- Additional functions: **Data hold, data record, data readback.**
- keys can be locked.
- Open calibration function.
- Square wave output.(Optional.)
- Provide system settings, can configure the language(Chinese / English), buzzer, screen brightness, interface display style.
- Temperature: Thermocouple: K/N/R/S/T/B/E/J/WRe325/WRe526; RTD: PT100 / PT50 / Cu100 / Cu50.
- Communication Interface: Standard: USB Device; Optional: RS232, USB Host, GPIB, LAN, WIFI, Bluetooth.
- Support SCPI protocol.
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Mode	MDM8145A			
Display digits	22000(4½)			
Maximum measurement speed	7 times / sec			
Function	DC voltage	DC current	AC voltage	AC current
Accuracy	$\pm(0.05\%+3)$	$\pm(0.35\%+10)$	$\pm(0.8\%+80)$	$\pm(0.8\%+80)$
Range	10uV~1000V	10nA~10A	10uV~750V	10nA~10A
Highest resolution	10uV	10nA	10uV	10nA
	--		40Hz~100kHz	40Hz~10kHz
Function	Resistance	Capacitance	Frequency	Period
Accuracy	$\pm(0.1\%+6)$	$\pm(3.5\%+30)$	$\pm(0.2\%+10)$	$\pm(0.2\%+10)$
Range	10mΩ~200MΩ	1pF~10mF	1Hz~20MHz	50ns~500ms
Highest resolution	10mΩ	1pF	0.001Hz	0.01ns
Others				
Mathematical functions	MX+B/MAX/MIN/dB/dBm/Rel/Comp Hi/Comp Low/Hold/Statistics			
Resistance measurement	Support 2-wire, 4-wire in two ways.			
Continuity test	When the resistance is less than 30 ohms, the buzzer sounds.			
Diode test	Measurable range: 0~2V			
AC+DC measurement	Support.			
Trigger mode	Standard: automatic trigger, single trigger; Optional: external trigger.			

Duty cycle measurement	5.0%～95.0%. (the error is within 10 words.)			
Square wave output	Frequency: 1Hz～100kHz, amplitude: 3V.(Optional.)			
Limit test	Support.			
Calibration	Support.			
Temperature	Thermocouple: K/N/R/S/T/B/E/J/WRe325/WRe526; RTD: PT100/PT50/Cu100/ Cu50.			
Communication Interface	Standard: USB Device; Optional: USB Host, RS232, GPIB, LAN, WIFI, Bluetooth.			
Additional functions	Data hold, data record, data readback.			
Mode	MDM8146			
Display digits	22000(4½)			
Maximum measurement speed	7 times / sec			
Function	DC voltage	DC current	AC voltage	AC current
Accuracy	± (0.02%+3)	± (0.1%+3)	± (0.2%+20)	± (0.3%+3)
Range	10uV~1100V	10nA~12A	10uV~800V	10nA~12A
Highest resolution	10uV	10nA	10uV	10nA
	--		40Hz~100kHz	40Hz~10kHz
Function	Resistance	Capacitance	Frequency	Period
Accuracy	± (0.05%+5)	± (2%+5)	± (0.05%+3)	±(0.05%+3)
Range	10mΩ~1GΩ	1pF~10mF	1Hz~20MHz	50ns~500ms
Highest resolution	10mΩ	1pF	0.001Hz	0.01ns
	Others			
Mathematical functions	MX+B/MAX/MIN/dB/dBm/Rel/Comp Hi/Comp Low/Hold/Statistics			
Resistance measurement	Support 2-wire, 4-wire in two ways.			
Continuity test	When the resistance is less than 30 ohms, the buzzer sounds.			
Diode test	Measurable range: 0～2V			
AC+DC measurement	Support.			
Trigger mode	Standard: automatic trigger, single trigger; Optional: external trigger.			
Duty cycle measurement	5.0%～95.0%. (the error is within 10 words.)			
Square wave output	Frequency: 1Hz～100kHz, amplitude: 3V.(Optional.)			
Limit test	Support.			
Calibration	Support.			
Graphic display	Trend chart, Histogram, Bar Meter.			
Customized sensor	Users can customize the relationship curve, through the USB communication port or U disk to download, support up to 20 kinds.			
Temperature	Thermocouple: K/N/R/S/T/B/E/J/WRe325/WRe526; RTD: PT100/PT50/Cu100/ Cu50.			
Communication Interface	Standard: USB Device; Optional: USB Host, RS232, GPIB, LAN, WIFI, Bluetooth.			
Additional functions	Data hold, data record, data readback.			