



METER

- PORTABLE MULTIMETER
- BENCHTOP MULTIMETER
- WATTMETER
- STUDENT METER
- PORTABLE DIGITAL CURRENT CLAMP AND MORE...

WD SERIES

**Features**

- .Mono-phase and tri-phase balance measures
- .Auto range selecting (WD3000)
- .Small power measure
- .Connection and operation simplicity
- .Accuracy: better than 2% at the full current and voltage scale
- .Protection against over-currents by fuses
- .Over current and over voltage indicator

WD2250A

Specifications

- .AC operation
- .Current ranges: 0.1A, 0.5A, 1A, 5A
- .Voltage ranges: 3V, 15V, 30V, 240V, 450V
- .Power measured: 0.3W~2250W (rate capacity)
- .Frequency ranges: 0~3kHz
- .LCD display: 3 1/2 digits
- .Dimensions: 235(W) × 75(H) × 170(D)mm
- .Weight: 0.6kg



WD2250A

WD2250B

Specifications

- .Battery operation
- .Automatic shutdown of the wattmeter after 2mins with battery saver
- .The running time is about 8 hours in continuous operation
- .Current ranges: 0.1A, 0.5A, 1A, 5A
- .Voltage ranges: 3V, 15V, 30V, 240V, 450V
- .Power measured: 0.3W~2250W (rate capacity)
- .Frequency ranges: 0~3kHz
- .LCD display: 3 1/2 digits
- .Dimensions: 235(W) × 75(H) × 170(D)mm
- .Weight: 0.6kg



WD2250B

WD3000

Specifications

- .AC operation
- .Current ranges: 0~7A
- .Voltage ranges: 0~450V
- .Power measured: 0.3W~3150W (rate capacity)
- .Frequency ranges: 0~3kHz
- .LCD display: 3 1/2 digits
- .Dimensions: 235(W) × 75(H) × 170(D)mm
- .Weight: 0.6kg



WD3000

STUDENT METER

Feature**.Compact size**

- .Easy operation and stable work
- .Binding post or safety socket connection
- .Suitable for school experiment

S Series Specifications**Current Meter**

Model	Type	Range	Connector
DCA-1S	Ampere meter DC	0-50mA-500mA-5A	Safety Socket
ACA-1S	Ampere meter AC	0-500mA-1A-5A	Safety Socket

Voltage Meter

Model	Type	Range	Connector
DCV-1S	Volt meter DC	0-3V-30V-300V	Safety Socket
DCV-2S	Volt meter DC	0-300mV-3V-30V	Safety Socket
ACV-1S	Volt meter AC	0-15V-150V	Safety Socket

Galvano Meter

Model	Type	Range	Connector
DCG-1S	Galvano meter	$\pm 35 \mu A$	Safety Socket
DCG-2S	Galvano meter	$\pm 30mA$	Safety Socket
DCG-3S	Galvano meter	$\pm 300 \mu A$	Safety Socket

**DCA-1S****DCV-2S****DCG-1S****Normal Series Specifications****Current Meter**

Model	Type	Range	Connector
DCA-1	Ampere meter DC	0-50mA-500mA-5A	Binding Post
ACA-1	Ampere meter AC	0-500mA-1A-5A	Binding Post

Voltage Meter

Model	Type	Range	Connector
DCV-1	Volt meter DC	0-3V-30V-300V	Binding Post
DCV-2	Volt meter DC	0-300mV-3V-30V	Binding Post
ACV-1	Volt meter AC	0-15V-150V	Binding Post

Galvano Meter

Model	Type	Range	Connector
DCG-1	Galvano meter	$\pm 35 \mu A$	Binding Post
DCG-2	Galvano meter	$\pm 30mA$	Binding Post
DCG-3	Galvano meter	$\pm 300 \mu A$	Binding Post

**DCA-1****DCV-2****DCG-1**

RS SERIES

**Features:**

- . Portable meter
- . Easy operation and stable work
- . Safety socket connection
- . Suitable for school experiment

Specifications

Current meter:

Model	Type	Range	Accuracy
RS3248	Digital DC current meter	0~1999mA	0.5%
RS3250	Digital AC current meter	0~19.99A	1%

Dimensions: 94×150×35 mm

Weight: 150g

**RS 3248**

Voltage meter:

Model	Type	Range	Accuracy
RS3249	Digital DC voltage meter	0~199.9V	0.5%
RS3251	Digital AC voltage meter	0~1000V	1%

Dimensions: 94×150×35 mm

Weight: 150g

**RS 3249**

Galvanometer:

Model	Type	Range	Accuracy
RS3252	Digital galvanometer	±0~1999 μA	0.5%

Dimensions: 94×150×35 mm

Weight: 150g

**RS 3252**

SAM-001

Features

- .Max 10A current measuring
- .Both AC and DC current measuring
- .Solid structure with metal casing
- .4mm safety socket input



SAM-001

Technical Data	DC	AC
Measuring range	0~1mA	
	0~10mA	0~10mA
	0~100mA	0~100mA
	0~1A	0~1A
	0~10A	0~10A
Accuracy	1.5%	2.5%
Dimensions(W×H×D)	170×130×54mm	
Weight	910g	

SVM-001

Features

- .Max 1000V voltage measuring
- .Both AC and DC voltage measuring
- .Solid structure with metal casing
- .4mm safety socket input



SVM-001

Technical Data	DC	AC
Measuring range	0~0.1V	
	0~1V	0~3V
	0~10V	0~10V
	0~100V	0~100V
	0~1000V	0~1000V
Accuracy	1.5%	2.5%
Dimensions(W×H×D)	170×130×54mm	
Weight	760g	

D SERIES



Features:

- .Four ranges
- .2000 counts display
- .Simple and extremely safe to use
- .Safety sockets and dual insulation



DAA-1



DAV-1



DDA-1



DDV-1

Specifications

Model	Type	Range/Resolution	Accuracy	Fuse
DDV-1	DC voltage meter	200mV/0.1mV	$\pm(0.5\%+1\text{digits})(200\text{mV})$	NA
		2V/0.001V	$\pm(0.8\%+1\text{digits})(2\text{V}/20\text{V}/200\text{V})$	
		20V/0.01V		
		200V/0.1V		
DDA-1	DC current meter	2mA/0.001mA	$\pm(1\%+1\text{digits})(2\text{mA}/20\text{mA}/200\text{mA})$	5A(5A) 500mA(2mA/20mA/200mA)
		20mA/0.01mA	$\pm(1.5\%+2\text{digits})(5\text{A})$	
		200mA/0.1mA		
		5A/0.01A		
DAV-1	AC voltage meter	2V/0.001V	$\pm(1\%+2\text{digits})$	NA
		20V/0.01V		
		200V/0.1V		
		600V/1V		
DAA-1	AC current meter	2mA/0.001mA	$\pm(1.2\%+2\text{digits})(2\text{mA}/20\text{mA}/200\text{mA})$	5A(5A) 500mA(2mA/20mA/200mA)
		20mA/0.01mA	$\pm(1.5\%+3\text{digits})(5\text{A})$	
		200mA/0.1mA		
		5A/0.01A		

Dimensions: 190×140×80 mm

Weight: 150g

MT8145D



Features

- .4 7/8 digits LCD display with back light, dual display
- .External large LED display for demonstration
- .Multi-function of ACV/DCV, ACA/DCA, R, Hz, Max/Min/Main, REL, Hold, dBm, diode test and continuity beeper test
- .High resolution of 10 μ V, 10 μ A, 10m Ω , 0.01Hz
- .Manual or auto ranging
- .0.03% DCV accuracy
- .1000V high voltage range
- .AC or AC + DC true rms
- .Overload protection
- .RS232 interface



MT8145D

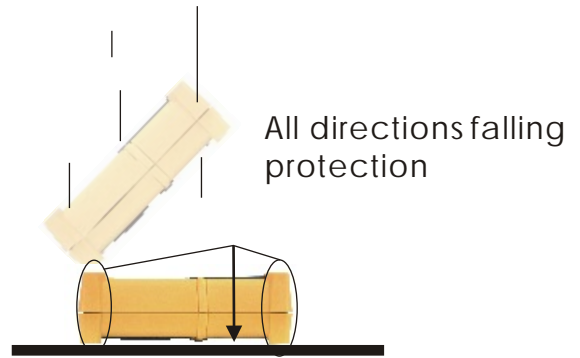
Technical Data	MT8145D		
DC voltage	Range	80mV, 800mV, 8V, 80V, 800V, 1000V	
	Accuracy	$\pm(0.03\%rdg+3digits)$	
	Input impedance	1000M Ω (300mV, 3V) 10M Ω (other ranges)	
AC voltage (AC or AC+DC true rms)	Range	80mV, 800mV, 8V, 80V, 750V	
	Accuracy	80mV~80V range	20~50Hz: $\pm(0.8\%rdg+50digits)$ 50Hz~20kHz: $\pm(0.8\%rdg+50digits)$ 20~50kHz: $\pm(1.5\%rdg+50digits)$ ($<75\%$ range) 50Hz~ 20kHz: $\pm(5.0\%rdg+50digits)$ ($>75\%$ range)
		750V range	50Hz~1kHz: $\pm(0.8\%rdg+50digits)$
		Input impedance	1M Ω series with 0.1 μ F
DC current	Range	80mA, 800mA, 8A, 20A	
	Accuracy	$\pm(0.2\%rdg+10digits)$ $<800mA$ range $\pm(0.5\%rdg+10digits)$ $>8A$ range	
AC current	Range	80mA, 800mA range	
	Accuracy	50Hz~10kHz: $\pm(0.8\%rdg+20digits)$	
		8A, 10A range	50Hz~500Hz: $\pm(1.0\%rdg+20digits)$
Resistance	Range	800 Ω , 8k Ω , 80k Ω , 800k Ω , 8M Ω , 80M Ω	
	Accuracy	800 Ω ~300k Ω range	$\pm(0.3\%rdg+10digits)$
		8k Ω ~8M Ω range	$\pm(0.3\%rdg+5digits)$
Capacitance	Range	1nF, 10nF, 100nF, 1 μ F, 10 μ F, 100 μ F	
	Accuracy	1nF range	$\pm(5\%rdg+50digits)$
		10nF~100 μ F range	$\pm(2.5\%rdg+50digits)$
Frequency hFE (PNP or NPN)	Range	999099Hz~1000.0MHz	
	Accuracy	$\pm(0.05\%rdg+5digits)$	
	Display	$\pm(0.1\%rdg+5digits)$	
Diode test	Test condition	Current is approx.10 μ A, Vce is approx.3V Check the forward voltage of diode. Maximum forward voltage 2V, open voltage 2.8V	
Continuity beeper		$<5\Omega$	
NMRR		$>60dB$	
CMRR		$>120dB$	
Power source		110 ~ 127VAC $\pm 10\%$ /220 ~ 240VAC $\pm 10\%$, 50Hz $\pm 2Hz$ /60Hz $\pm 2Hz$	
Dimensions(W \times H \times D)		260mm \times 220mm \times 82mm	
Weight		Approx. 1.5kg	

MS 300 SERIES



Feature

- .Sturdy, simple and extremely safe to use
- .High accuracy and reliability
- .Combination of electronic and mechanical advantage
- .Single switch for range selection
- .Safety sockets and dual insulation
- .Moulded, water-resistant casing



Technical data	MS-301	MS-302	MS-303
Function	AC/DC Current meter	AC/DC Voltmeter	Galvano Meter
Range	AC 10mA~10A(7Steps) DC 100uA~10A(11Steps)	AC 3V~1000V(6Steps) DC 100mV~1000V(8Steps)	DC 30uA~3mA(2 Steps) DC 100mV(1Step for shunts)
Accuracy	1.5%(DC), 2%(AC)	1.5%(DC), 2%(AC)	1.5%
Operating frequency	45~400Hz	20~400Hz	
Fuse	1A and 10A	Electronic Protection	200mA
Accessories	NA	NA	NA

Dimensions: 170×165×55 mm

Weight: 200g



MS-301



MS-302



MS-303

Technical data	MS-304	MS-305	MS-306
Function	Single phase wattmeter	Single and 3-phase wattmeter	Multi-Meter
Range	AC/DC 60-120-240-480V AC/DC 2.5A/5A	AC/DC 60-120-180-240-360-480V(1 Ph.) AC/DC 60√3 -120√3 -180√3 -240√3 V(3 Ph.)	DCV 2.5V~1000V(7 Steps) ACV 10V~1000V(6 Steps) DCA 50uA~10A(9 Steps) ACA 2.5mA~10A(7Steps) Resistance 1Ω~1KΩ(4Steps)
Accuracy	2.5%(DC), 1%(AC)	2.5%(DC), 1%(AC 1 Ph.), 2%(AC 3 Ph.)	1.5%(DC), 2.5%(AC)
Operating frequency	0~500Hz	0~500Hz	20~400Hz
Fuse	1A	5A	10A and 1A
Accessories	NA	NA	Testleads × 2

Dimensions: 170×165×55 mm

Weight: 200g



MS-304



MS-305



MS-306

MS 500 SERIES

Feature

- .Sturdy, simple and extremely safe to use
- .LCR measuring (MS-508 only)
- .High accuracy and reliability
- .Combination of electronic and mechanical advantage
- .Single switch for range selection
- .Safety sockets and dual insulation

Technical data	MS-501	MS-502
Function	AC/DC Current meter	AC/DC Voltage meter
Range	AC: 3mA/10mA/30mA/100mA/300mA/1A/3A/10A DC: 100uA/300uA/1mA/3mA/10mA/30mA/100mA 300mA/1A/3A/10A	DC: 0.1V/1V3V/10V/30V/100V/300V/1kV AC: 3V/10V/30V/100V/300V/1kV
Accuracy	DC: 2.0%, 3.0% (3A/10A) AC: 3.0%, 4.0% (3A/10A)	DC: 2.0%, AC: 3.0%
Accessories	NA	NA

Dimensions: 160×105×44 mm

Weight: 300g



MS-501



MS-502

Technical data	MS-503	MS-507
Function	Galvano Meter	OHM Meter
Range	DC 100mV DC 30uA/3mA	0~5 Ω / 0~25 Ω / 0~50 Ω
Accuracy	2.0%	3.0% (0~5 Ω), 2.0% (0~25 Ω / 0~50 Ω)
Accessories	NA	NA

Dimensions: 160×105×44 mm

Weight: 300g



MS-503



MS-507

Technical data	MS-506-A			
Function	Multimeter			
Measuring range	0~1/3/10/30V (DC)	0~1/3/10A (DC)	0~1/3/10/30V (AC)	0~1/3/10A (AC)
	0~100mV (DC)	0~10/30/300mA (DC)	0~100mV (AC)	0~10/30/300mA (AC)
	0~1mV (DC)	0~100uA (DC)	0~1mV (AC)	0~100uA (AC)
Accuracy	2.0%	3.0%	3.0%	4.0%
Accessories	NA			

Technical data	MS-506-B			
Function	Multimeter			
Measuring range	0~1/3/10/30V (DC)	0~1/3/10A (DC)	0~1/3/10/30V (AC)	0~1/3/10A (AC)
	0~100mV (DC)	0~10/30/300mA (DC)	0~100mV (AC)	0~10/30/300mA (AC)
Accuracy	2.0%	3.0%	3.0%	4.0%
Accessories	NA			

Dimensions: 160×105×44 mm

Weight: 350g



MS-506A



MS-506B

Technical data	MS-508			
Function	LCR Multimeter			
Measuring range	0~10V/500V (DC) 0~500V (AC)	0.2~2k Ω/2~20k Ω/20~200k Ω 200~2M Ω/2k~20M Ω 20k~200M Ω/200k~2000M Ω	0~2.5mH/25mH 250mH/2.5H/25H	C1: 0~2.5nF/25nF/250nF/1uF 5uF/25uF/250uF C2: 10-4000uF
Accuracy	3.0%	3.0%, 4.0% (200k~2000M Ω)	3.0%	3.0%
Accessories	NA			

Dimensions: 160×105×44 mm

Weight: 400g



MS-508

JL SERIES



Feature

.Compact size

.Easy operation and stable work

.Safety sockets and high reliability

.Novel design and various types for you



JL-01



JL-02

Technical data	JL-01	JL-02
Function	Frequency meter	Frequency meter
Type	Analog	Reed
Range	45~55Hz(220V AC)	45~55Hz(220V AC) 55~65Hz(220V AC)
Accuracy	1.0%	1.0%



JL-03



JL-04

Technical data	JL-03	JL-04
Function	Wattmeter	Wattmeter
Type	Single phase	Three phase
Range	0~1kW (L-N 220V/5A)	0~4kW (L-L 380V/5A)
Accuracy	1.5%	1.5%

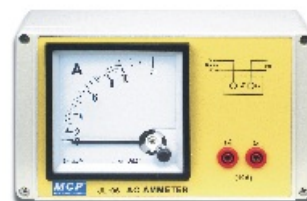


JL-05



JL-08

Technical data	JL-05	JL-08
Function	Power factor meter	Power factor meter
Type	Three phase	Single phase
Range	0.5~1~0.5 (380V/5A)	0.5~1~0.5 (220V/5A)
Accuracy	2.5%	2.5%



JL-06



JL-07

Technical data	JL-06	JL-07
Function	AC ammeter	AC voltmeter
Range	0~5A	0~500V
Accuracy	1.5%	1.5%

MU39A



NEW

Features

.3 3/4 digit display

- .Max. test voltage up to 1000VDC and 750VAC
- .Various kinds of function: auto power off, diode test, triode test, On/Off buzzer and data hold



MU39A

Technical Data		MU39A
DC voltage	Range	400mV/4V/40V/400V/1000V
	Accuracy	±(0.5% +5)
AC voltage	Range	4V/40V/400V/750V
	Accuracy	±(0.8% +3)
DC current	Range	40 μ A/400 μ A/4mA
	Accuracy	40mA/400mA/10A ±(0.8% +3)
AC current	Range	400 μ A/40mA
	Accuracy	400mA/10A ±(1% +2)
Resistance	Range	400 Ω/4k Ω/40k Ω
	Accuracy	400k Ω/4M Ω/200M Ω ±(0.8% +2)
Capacitance	Range	4nF/40nf/400nF/4uF/40uF/400uF/4mF/10mF
	Accuracy	±(4% +5)
Frequency response		40Hz~400Hz
Diode test		✓
Transistor hFE		✓
On/Off buzzer		✓
Auto power off		✓
Data hold		✓
Low battery warning		✓
Max display		3999
Power supply		AA×2 battery
Weight		330g
Dimensions (W×H×D)		175 mm×83 mm×53 mm

MV833



NEW

Features

.3 1/2 digit display

- . True RMS, Non-contact voltage detect (NCV) function
- . Backlight display, diode test/hFE test
- . Strong antimagnetic and anti-interferential performance, full function protection
- . Auto power off when there is no measurement in 15 minutes
- . Unit symbol display, easy to read, data hold
- . Large LCD display makes reading clear
- . New type holster, streamlined design, comfortable handle



MV833

Technical Data

MV833

Basic function	Range	Basic Accuracy
DCV	200mV / 2V / 20V / 200V / 600V	±(0.5% +4)
ACV	200V / 600V	±(1.0% +6)
DCA	20 μA / 2mA / 200mA / 10A	±(1.0% +5)
Resistance	200Ω / 2kΩ / 20kΩ / 2MΩ / 200MΩ	±(0.8% +1)
Special function		
NCV	✓	
TRMS	✓	
Backlight display	✓	
Diode test	0V~2V, it displays "OL" if over 2V	
hFE test	0~2000	
Data hold	✓	
Function protection	✓	
Continuity alarm	Less than 50Ω, it displays "OL" if over 200Ω	
Low battery indicator	Approx. less than 2.4 V	
Auto power off	About 15 minutes	
General characteristic		
Input impedance	10MΩ	
Sampling rate	3 times/s	
AC frequency response	40Hz-400Hz	
Operation method	Manual range	
Max. display	2000	
LCD size	61x28mm	
Battery	3V, AAAX 2	
Power consumption	Quiescent current about 2mA	
LCD size	61x28mm	
Meter weight	195g (including battery)	
Meter size	140 mm×72 mm×37 mm	
Standard accessory	Testleads, battery, manual	

MV837



NEW

Features

.3 5/6 digit display

- .Auto Range, true RMS, Non-contact voltage detect (NCV) function
- .Lighting function, Backlight display, Diode test
- .Strong antimagnetic and anti-interferential performance, full function protection
- .Auto power off when there is no measurement in 15 minutes
- .Unit symbol display, easy to read, data hold
- .Large LCD display makes reading clear
- .New type holster, streamlined design, comfortable handle



MV837

Technical Data	MV837
Basic function	Range
DCV	600mV / 6V / 60V / 600V
ACV	6V / 60V / 600V
DCA	600uA / 6000uA / 60mA / 600mA / 6A / 10A
ACA	600uA / 6000uA / 60mA / 600mA / 6A / 10A
Resistance	600Ω / 6kΩ / 60kΩ / 600kΩ / 6MΩ / 60MΩ
Capacitance	60nF / 600nF / 6uF / 60uF / 600uF / 6mF
Frequency	10Hz / 100Hz / 1kHz / 10kHz / 100kHz
Temperature	-40°C ~ 1000°C / 0°F ~ 1832°F
Special function	
TRMS	✓
NCV	✓
Data hold	✓
Function protection	✓
Backlight display	✓
Duty cycle	1%~99%
Diode test	0V~3.3V, it displays "OL" if over 3.3V
Continuity alarm	Less than 50Ω, it displays "OL" if over 610Ω
Low battery indicator	Approx. less than 2.4 V
Auto power off	About 15 minutes
General characteristic	
Input impedance	10MΩ
Sampling rate	3 times/s
AC frequency response	40Hz-2kHz
Operation method	Manual or Auto range
Max. display	6000
LCD size	61x28mm
Battery	3V, AAA X 2
Power consumption	Quiescent current about 2mA
LCD size	61x28mm
Meter weight	195g (including battery)
Meter size	140 mm × 72 mm × 37 mm
Standard accessory	Test leads, battery, manual, TP01 temperature probe

MC200



NEW

Features

.3 1/2 digit display

- .Clamp open 28mm
- .Portable design, easy use
- .Full function protection, strong anti-interferential performance
- .CE standard design, improving the safety of test
- .Max/Min, data hold
- .Non-contact voltage testing with visible alarm
- .Clamp light display and backlight display
- .True RMS
- .Battery function



MC200

Technical Data	MC200	
Basic function		Range
DCV	200mV / 2V / 20V / 200V / 600V	Basic Accuracy
ACV	2V / 20V / 200V / 600V	±(0.5% +5)
ACA	2A / 20A / 200A / 600A	±(1.0% +5)
Resistance	200Ω / 2kΩ / 20kΩ / 200kΩ / 2MΩ / 20MΩ	±(2.0% +5)
Battery/voltage measurement	20V	±(0.8% +1)
Special function		
NCV	√	
Diode test	0V~2V, it displays "OL" if over 2V	
TRMS	√	
Continuity alarm	Less than 50Ω, it displays "OL" if over 200Ω	
Low battery indicator	Approx. less than 2.4 V	
Data hold	MAX/MIN,HOLD	
Auto power off	About 15 minutes	
Function protection	√	
Clamp light display	√	
Backlight display	√	
General characteristic		
Input impedance	10MΩ	
Sampling rate	3 times/s	
AC frequency response	Current (50-60)Hz / Voltage (50-400)Hz	
Operation method	Manual or auto range	
Max. display	1999	
Clamp open	28mm	
Power source	3V, AAA X 2	
Meter weight	200g (including battery)	
Standard accessory	Testleads, battery, English manua	

MC216



NEW

Features

.3 5/6 digit display

- . Clamp open 28mm
- . TRUE RMS, Data hold, Duty cycle test, REL test
- . Non-contact voltage testing with visible alarm
- . Clamp light display, or backlight display
- . Portable design, easy use
- . Full function protection, strong anti-interferential performance
- . CE standard design, improving the safety of test



MC216

Technical Data	MC216	
Basic function	Range	Basic Accuracy
DCV	600mV / 6V / 60V / 600V	±(0.5% +3)
ACV	6V / 60V / 600V	±(0.8% +5)
DCA	20A / 200A / 600A	±(2.0% +30)
ACA	2A / 20A / 200A / 600A	±(2.0% +30)
Resistance	600Ω / 6kΩ / 60kΩ / 600kΩ / 6MΩ / 60MΩ	±(0.8% +3)
Capacitance	6nF/60nF/600nF/6uF/60uF/600uF/4mF/40mF	±(3.5% +20)
Frequency	10Hz / 100Hz / 1kHz / 10kHz / 100kHz / 1MHz / 10MHz	±(0.1% +3)
Temperature	-40°C~1000°C / 0°F~1832°F	±(1.0% +5)
Special function		
TRMS	✓	
NCV	✓	
Diode test	✓	
Continuity alarm	Less than 50Ω, it displays "OL" if over 600Ω	
Low battery indicator	Approx. less than 2.4 V	
Data hold	✓	
Auto power off	About 15 minutes	
Function protection	✓	
Clamp light	✓	
Backlight display	✓	
General characteristic		
Input impedance	10MΩ	
Sampling rate	3 times/s	
AC frequency response	Current 40-1kHz / voltage 40-2kHz	
Operation method	Manual or Auto range	
Max. display	6000	
Clamp opens	28mm	
Battery	3V, AAA X 2	
Meter weight	200g (including battery)	
Meter size	210 mm × 110 mm × 45 mm	

DT SERIES



Features

- .Wide measuring range and high resolution
- .Both photoelectric and contact measuring (DT-6236B)
- .Max. value, Min. value and last value memory
- .Low battery indication



DT-6236B



DT-2235B+

Technical Data		DT-6236B	DT-2235B+
Photoelectric rotation speed	Range	2.5~9999RPM (r/min)	NA
	Accuracy	±(0.05% +1)	NA
Contact rotation speed	Range	0.5~19999RPM (r/min)	0.5~19999RPM (r/min)
	Accuracy	±(0.05% +1)	±(0.05% +1)
Contact line speed (metric)	Range	0.05~1999.9m/min (m/min)	0.5~1999.9m/min (m/min)
	Accuracy	±(0.05% +1)	±(0.05% +1)
Resolution		Photoelectric rotation speed: 0.1RPM (2.5~999.9RPM) 1RPM (over 1000RPM) Contact rotation speed: 0.1RPM (0.5~999.9RPM) 1RPM (over 1000RPM) Contact line speed: 0.01m/min (0.05~99.99m/min) 0.1m/min (over 100m/min)	Contact rotation speed: 0.1RPM (2.5~999.9RPM) 1RPM (over 1000RPM) Contact line speed: 0.01m/min (0.05~99.99m/min) 0.1m/min (over 100m/min)
Sampling time		0.5s (over 120RPM)	0.5s (over 120RPM)
Range selection		Auto	Auto
Effective distance		50mm~250mm	NA
Power consumption		Max. 45mA	Max. 45mA
Memory		Max., Min., Lastvalue	Max., Min., Lastvalue
Time base		6MHz Quartz crystal	6MHz Quartz crystal
Battery accuracy of time base		10×10 ⁻⁶ (0°C~50°C)	10×10 ⁻⁶ (0°C~50°C)
Power supply		4×1.5V AA or external 6VDC	4×1.5V AA
Max. display		99999	99999
LCD size		5digits 18mm	5digits 18mm
Back light		Yellow green back light LCD	Yellow green back light LCD
Weight		0.5kg	0.5kg
Dimensions (W×H×D)		160 mm×72 mm×37 mm	190 mm×72 mm×37 mm

GM816 DIGITAL ANEMOMETER



Features

.Both air velocity and air temperature measuring
 .Different velocity indicating and temperature indicating

Technical Data	GM816	
Air velocity	Range	0~30m/s, 0~90km/h, 0~5860ft/min, 0~55knots, 0~65mph
	Accuracy	±5%
	Resolution	0.2m/s
Air temperature	Range	-10°C~45°C, 14F~113F
	Accuracy	±2%
	Resolution	0.2°C
Wind chill	✓	
Beaufort scale indication	✓	
°C/F selection	✓	
Low battery indication	✓	
Auto power off	1 min. without any operation	
Backlight	12 sec. active by press any key	
Max./Avg./current reading	✓	
Power supply	2×1.5V AA	
Weight	55g	
Dimensions (W×H×D)	60 mm×105 mm×20 mm	



GM816

GM1357 DIGITAL SOUND LEVEL METER



Features

.Both dBA and dBC frequency weighting characteristic

Technical Data	GM1357
Measuring range	30~130dBA; 35~130dBC
Accuracy	±1.5dB
Resolution	0.1dB (5 digits)
Frequency response	31.5Hz~8.5kHz
Measuring level range	30~130, 40~90, 50~100, 60~110, 80~130
Frequency weighting characteristic	A&C
Time weighting	Fast/Slow
Sampling rate	2 times/second
Microphone	1/2 inch polarization capacitance microphone
AC/DC output	✓
Max. reading	✓
Overload indication	Over/Under
Low battery indication	✓
Power supply	4×1.5V AA or 6VDC/100mA adapter
Weight	310g
Dimensions (W×H×D)	70 mm×256 mm×35 mm



GM1357

MT8045



Features

- . 4 1/2 digits LCD display with back light
- . Multi-function of ACV/DCV, ACA/DCA, R, C, Hz, hFE, diode test and continuity beeper test
- . High resolution of 10 μ V, 10 μ A, 10m Ω , 1pF, 0.1Hz
- . 0.05% DCV accuracy
- . 20A high current range
- . 1000V high voltage range
- . AC or AC + DC true rms
- . Overload protection



MT8045

MT8145



Features

- . 4 7/8 digits LCD display with back light, dual display
- . Multi-function of ACV/DCV, ACA/DCA, R, Hz, Max/Min/Main, REL, Hold, dBm, diode test and continuity beeper test
- . High resolution of 10 μ V, 10 μ A, 10m Ω , 0.01Hz
- . Manual or auto ranging
- . 0.03% DCV accuracy
- . 1000V high voltage range
- . AC or AC + DC true rms
- . Overload protection
- . RS232 interface



MT8145

Technical Data	MT8045	MT8145	
DC voltage	Range	200mV, 2V, 20V, 200V, 1000V	80mV, 800mV, 8V, 80V, 800V, 1000V
	Accuracy	$\pm(0.05\%rdg+3digits)$	$\pm(0.03\%rdg+3digits)$
	Input impedance	10M Ω	1000M Ω (300mV, 3V) 10M Ω (other ranges)
AC voltage (AC or AC+DC true rms)	Range	200mV, 2V, 20V, 200V, 750V	80mV, 800mV, 8V, 80V, 750V
	Accuracy	200mV range 50Hz ~ 50kHz: $\pm(0.8\%rdg+80digits)$	80mV~80V range 20~50Hz: $\pm(0.8\%rdg+50digits)$
		2V ~ 20V range 50Hz ~ 20kHz: $\pm(0.8\%rdg+80digits)$	50Hz~20kHz: $\pm(0.8\%rdg+50digits)$
		200V range 50Hz ~ 5kHz: $\pm(0.8\%rdg+80digits)$	20~50kHz: $\pm(1.5\%rdg+50digits)$ ($<75\%$ range)
750V range 50Hz ~ 400Hz: $\pm(1.0\%rdg+50digits)$	50Hz~ 20kHz: $\pm(5.0\%rdg+50digits)$ ($>75\%$ range)		
Input impedance	2M Ω	1M Ω series with 0.1 μ F	
DC current	Range	20mA, 200mA, 2A, 20A	80mA, 800mA, 8A, 20A
	Accuracy	$\pm(0.35\%rdg+10digits)$ 20mA, 200mA range $\pm(0.8\%rdg+10digits)$ 2A, 20A range	$\pm(0.2\%rdg+10digits)$ $<800mA$ range $\pm(0.5\%rdg+10digits)$ $>8A$ range
AC current	Range	200mA, 2A, 20A	80mA, 800mA, 8A, 20A
	Accuracy	200mA range 50Hz ~ 5kHz: $\pm(0.8\%rdg+80digits)$	80mA, 800mA range 50Hz~10kHz: $\pm(0.8\%rdg+20digits)$
		2A~20A range 50Hz ~ 400Hz: $\pm(1.0\%rdg+50digits)$	8A, 10A range 50Hz~500Hz: $\pm(1.0\%rdg+20digits)$
Resistance	Range	200 Ω , 2k Ω , 20k Ω , 200k Ω , 2M Ω , 20M Ω	800 Ω , 8k Ω , 80k Ω , 800k Ω , 8M Ω , 80M Ω
Capacitance	Range	20nF, 2 μ F, 200 μ F	1nF, 10nF, 100nF, 1 μ F, 10 μ F, 100 μ F
	Accuracy	$\pm(3.5\%rdg+20digits)$ 20nF, 2 μ F range $\pm(5.0\%rdg+30digits)$ 200 μ F range	$\pm(5\%rdg+50digits)$ 1nF range $\pm(2.5\%rdg+50digits)$ 10nF~100 μ F range
Frequency hFE (PNP or NPN)	Range	20kHz, 200kHz	999099Hz~1000.0MHz
	Accuracy	$\pm(1.0\%rdg+20digits)$	$\pm(0.05\%rdg+5digits)$
	Display	0 ~ 1000.0	$\pm(0.1\%rdg+5digits)$
Diode test	Test condition	Current is approx. 10 μ A, Vce is approx. 3V Check the forward voltage of diode. Maximum forward voltage 2V, open voltage 2.8V	
Continuity beeper		$<5\Omega$	
NMRR		$>60dB$	
CMRR		$>120dB$	
Power source		110 ~ 127VAC $\pm 10\%$ /220 ~ 240VAC $\pm 10\%$, 50Hz $\pm 2Hz$ /60Hz $\pm 2Hz$	
Dimensions(W \times H \times D)		260mm \times 220mm \times 82mm	
Weight		Approx. 1kg	