



METER

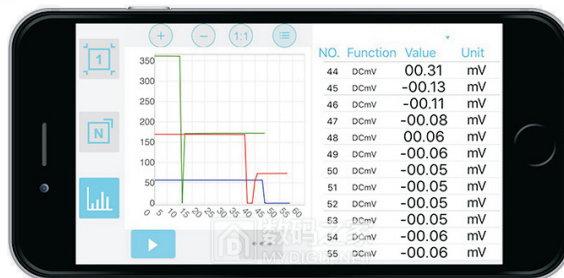


- PORTABLE MULTIMETER
- BENCHTOP MULTI METER
- PORTABLE LCR METER
- TRANSISTOR TESTER
- DIGITAL EARTH TESTER
- INSULATION RESISTANCE TESTER

MU16A/B and MU18A/B BLUETOOTH DIGITAL MULTIMETER

- **BLE 4.0 wireless transmission, more stable, less power consumption**
- Chart and Diagram mode helps to analyze the data tendency
- 3 5/6 bit resolution, LCD 69x52 / 47x27 mm
- Data Logger + Multimeter + Thermometer
- Support NCV non-contact voltage sense
- True RMS test supported
- Widely supported on Android, iOS and Windows
- Build-in offline record function supports non-stop up to 7 days non-stop recording

functioning as multimeter + datalogger



data- saving, recalling, and comparatively analyzing

No.	Func	Value	Unit
19	DCmV	020.1	mV
20	DCmV	292.2	mV
21	Open local file		
22	Save data		
23	Clear data		
24	Setting		
25	Exit		



MU16A / MU16B



NEW

Features

Auto ranging
Auto/Manual Scale Switch
LCD Backlight
Diode Test
Sleep Mode
Auto Power-off
Continuity Test

Bluetooth Module for MU16B

Data Hold
Audion Test
True RMS
Input Protection
Relative Measurement
Low-battery Indicator



MU16B

Technical Data	Measurement Range	Resolution	Accuracy
DC voltage	600.0mV/6.000V/60.00V/600.0V	0.1mV	±(0.5%+2 dig)
	1000V	1V	±(0.8%+2 dig)
AC voltage	600.0mV	0.1mV	±(2.0%+5 dig)
	6.000V/60.00V/600.0V	1mV	±(0.8%+3 dig)
	750V	1V	±(1.0%+3 dig)
DC current	600.0uA/6000uA	0.1uA	±(0.8%+2 dig)
	60.00mA/600.0mA	0.01mA	±(0.8%+2 dig)
	10.00A	0.01A	±(1.2%+3 dig)
AC current	600.0uA/6000uA	0.1uA	±(1.0%+3 dig)
	60.00mA/600.0mA	0.01mA	±(1.0%+3 dig)
	10.00A	0.01A	±(1.5%+3 dig)
Resistance	600.0Ω/6.000kΩ/60.00kΩ/ 600.0kΩ/6.000MΩ	0.1Ω	±(0.8%+2 dig)
	60.00MΩ	0.01MΩ	±(2.0%+3 dig)
Capacitance	60.00nF/600.0nF/ 6.000μF/60.00μF	0.01nF	±(3.0%+3 dig)
	600.0μF/6.000mF/60.00mF	0.1μF	±(3.0%+5 dig)
Frequency	9.999Hz/99.99Hz/999.9Hz/ 9.999kHz/99.99kHz/ 99.9kHz/9.999MHz	0.001Hz	±(0.8%+2 dig)
Duty Ratio(%)	0.1%~99.9% (Typical: Vrms=1V,f=1kHz)	0.1%	±(1.2%+3 dig)
	0.1%~99.9% (≥1kHz)	0.1%	±(2.5%+3 dig)
Temperature	- 50 °C~400 °C	1°C	±(2.5%+3 dig)
	- 58 °F ~ 752 °F	1 °F	±(4.5%+5 dig)
Display	5999		
Frequency Response	40Hz-1000Hz		
Shift Rate	3 times/s		
Input Impedance	≥10MΩ		
Battery	3V (1.5V x 2) AA		
Dimension (W x H x D)	74 x 154 x 49 mm		
Weight	290g		

MU18A / MU18B



NEW

Features

Auto ranging	Bluetooth Module Only for MU18B
True RMS	LCD Backlight
Diode Test	Automatic-manual Range Selection
Auto Power-off	Input Protection
On-off Warning	Relative Measurement
Low-battery	Indicator Flashlight
Data Hold	NCV
Safety Compliance 600V CAT IV, 1000V CAT III	



MU18B

Technical Data	Measurement Range	Resolution	Accuracy
DC voltage	60.00mV/600.0mV	0.01mV	±(0.5%+2 dig)
	6.000V/60.00V/600.0V	0.1mV	±(0.5%+2 dig)
	1000V	1V	±(0.8%+2 dig)
AC voltage	60.00mV/600.0mV	0.01mV	±(0.8%+3 dig)
	600.0mV	0.1mV	±(2.0%+5 dig)
	6.000V/60.00V/600.0V	1mV	±(0.8%+3 dig)
	750V	1V	±(1.0%+3 dig)
DC current	600.0uA/6000uA	0.1uA	±(0.8%+2 dig)
	60.00mA/600.0mA	0.01mA	±(0.8%+2 dig)
	20.00A	0.01A	±(1.2%+3 dig)
AC current	600.0uA/6000uA	0.1uA	±(1.0%+3 dig)
	60.00mA/600.0mA	0.01mA	±(1.0%+3 dig)
	20.00A	0.01A	±(1.5%+3 dig)
Resistance	600.0Ω/6.000kΩ/60.00kΩ/ 600.0kΩ/6.000MΩ	0.1Ω	±(0.8%+2 dig)
	60.00MΩ	0.01MΩ	±(2.0%+3 dig)
Capacitance	60.00nF/600.0nF/ 6.000μF/60.00μF	0.01nF	±(3%+3 dig)
	600.0μF/6.000mF/60.00mF	0.1μF	±(3.0%+5 dig)
Frequency	9.999Hz/99.99Hz/999.9Hz/ 9.999kHz/99.99kHz/ 99.9kHz/9.999MHz	0.001Hz	±(0.8%+2 dig)
Duty Ratio(%)	0.1%~99.9% (Typical: Vrms=1V, f=1kHz)	0.1%	±(1.2%+3 dig)
	0.1%~99.9% (≥1kHz)	0.1%	±(2.5%+3 dig)
Temperature	- 50 °C~400 °C	1°C	±(2.5%+3 dig)
	- 58 °F ~ 752 °F	1 °F	±(4.5%+5 dig)
Display	5999		
Frequency Response	40Hz-1000Hz		
Shift Rate	3 times/s		
Input Impedance	≥10MΩ		
Battery	9V 6F22		
Dimension (W x H x D)	90 x 190 x 56 mm		
Weight	320g		

MT3803/3804**Features**

.3 1/2 digit display (MT3804 4 1/2)

.Capacitor, frequency and temperature measuring

.Max. test voltage up to 1000V

.Various kinds of function: auto power off, diode test, triode test, On/Off buzzer and data hold

**MT 3804**

Technical Data		MT3803	MT3804
DC voltage	Range	200mV/2V/20V/200V/1000V	200mV/2V/20V/200V/1000V
	Accuracy	$\pm(0.5\%+2)$	$\pm(0.1\%+3)$
AC voltage	Range	2V/20V/200V/1000V	2V/20V/200V/1000V
	Accuracy	$\pm(0.8\%+3)$	$\pm(0.5\%+20)$
DC current	Bandwidth	45Hz~400Hz	45Hz~400Hz
	Range	200 μ A/2mA/20mA/200mA/10A	200 μ A/2mA/20mA/200mA/10A
AC current	Accuracy	$\pm(0.8\%+2)$	$\pm(0.5\%+20)$
	Range	2mA/20mA/200mA/10A	2mA/20mA/200mA/10A
Resistance	Accuracy	$\pm(1.0\%+3)$	$\pm(0.8\%+40)$
	Bandwidth	45Hz~400Hz	45Hz~400Hz
Capacitor	Range	200 Ω /2k Ω /20k Ω /200k Ω 2M Ω /20M Ω	200 Ω /2k Ω /20k Ω /200k Ω 2M Ω /20M Ω /200M Ω
	Accuracy	$\pm(0.8\%+3)$	$\pm(0.5\%+10)$
Temperature	Test Current	0.7 μ A~1mA	0.7 μ A~1mA
	Range	20nF/2uF/200uF	20nF/2uF/200uF
Frequency	Accuracy	$\pm(4\%+3)$	$\pm(4\%+10)$
	Range	-40°C~1000°C	-40°C~1000°C
Diode test	Accuracy	$\pm(1.2\%+3)$	$\pm(1.2\%+25)$
	Range	2kHz/200kHz	2kHz/200kHz
On/Off buzzer	Accuracy	$\pm(1.5\%+5)$	$\pm(1.2\%+10)$
	Input Sencitivity	40mVrms	40mVrms
Triode test		✓	✓
Data hold		✓	✓
Background light		✓	✓
Low battery warning		✓	✓
Max display		1999	19999
Power supply		AC 220V/50Hz or R14 1.5V*6	
Weight		1.5kg	
Dimensions (W×H×D)		240×105×370mm	

MT 3805**Features**

- .5 1/2 digit display
- .USB and RS232 interface
- .Capacitor and frequency measuring
- .Max.test voltage up to 1000VDC and 750VAC
- .Various kinds of function: auto measuring range diode test, triode test, On/Off buzzer and data hold

**MT 3805**

Technical Data		MT3805
DC voltage	Range	200mV/2V/20V/200V/1000V
	Accuracy	$\pm(0.015\%+3)$
AC voltage	Range	200mV/2V/20V/200V/750V
	Accuracy	$\pm(0.2\%+100)$
	Bandwidth	40Hz~100kHz
DC current	Range	2mA/200mA/10A
	Accuracy	$\pm(0.05\%+10)$
AC current	Range	2mA/200mA/10A
	Accuracy	$\pm(0.3\%+100)$
	Bandwidth	40Hz~5kHz
Resistance	Range	200 Ω /2k Ω /20k Ω /200k Ω /2M Ω /20M Ω
	Accuracy	$\pm(0.02\%+6)$
Capacitor	Range	60nF/600nF/6 μ F/60 μ F/600 μ F/6mF
	Accuracy	$\pm(2\%+5)$
	Range	10Hz~60MHz
Frequency	Accuracy	$\pm(0.1\%+3)$
	Input range	1Hz~1MHz:150mV~30Vrms >1MHz~10MHz:300mV~30Vrms >10MHz~50MHz:600mV~30Vrms >50MHz:Not Specified
Diode test		✓
On/Off buzzer		✓
Triode test		✓
Data hold		✓
True RMS		✓
Auto measuring range		✓
RS232C		✓
USB		✓
Full character display		✓
Sleep mode		✓
Input resistance		Range 200mV and 2V: over 500M Ω ,other range: 10M Ω
Max display		199999
Power supply		AC 220V/50Hz
Weight		2.9kg
Dimensions (W×H×D)		240×105×370mm

BR2831/BR2832/BR2833**Features****.Hand-held and low consumption**

- .4 bins comparator
- .Primary and secondary parameters dual display
- .0.1% Max. accuracy, resolution 0.0001
- .Auto power off function

**BR2832**

Technical Data		BR2831/BR2832/BR2833	
Test parameters	L, C, D, R, Z , Q, θ , ESR		
Test frequencies	100Hz, 120Hz, 1kHz (BR2831) 100Hz, 120Hz, 1kHz, 10kHz (BR2832) 100Hz, 120Hz, 1kHz, 10kHz, 100kHz (BR2833)		
Test level	0.6Vrms		
Max. test accuracy	0.1%		
Output impedance	100 Ω		
Measurement range	L	100 / 120Hz	1 μ H ~ 1000H
		1kHz	0.1 μ H ~ 100H
		10kHz	0.001 μ H ~ 1H
	C	100 / 120Hz	1p ~ 20mF
		1kHz	0.1p ~ 1000 μ F
		10kHz	0.01p ~ 100 μ F
	R, Z	0.0001 Ω ~ 10M Ω	
	D	0.0001~ 9.999	
	Q	0.0001~ 9.999	
	θ	-179.9% ~ 179.9%	
ESR	0.0001 Ω ~ 999.9 Ω		
Display	40000 counts		
Display resolution	0.0001		
Measurement speed	10 times /sec (fast)	5 times/sec (middle)	2 times/sec (slow)
Eauivalent circuit	Series / parallel		
Ranging mode	Auto / hold		
Range selecting	Auto		
Tolerance mode	1%, 5%, 10%, 20%		
Correction function	Open and short multi-frequency Zeroing		
Measurement terminals	Five terminals/three terminals		
Input protection fuse	0.1A/63V		
Battery model	7.2V Ni-MH 600mAH rechargeable battery		
AC adapter	Input: 230V $\pm$ 10%, 50Hz $\pm$ 5% Output: 12V~15VDC		
Operating current	Max. 28mA		
Auto power off	5min, 15min, 30min, 60min selectable		
Dimensions(W $\times$ H $\times$ D)	95mm $\times$ 200mm $\times$ 45mm		
Weight	460g (with battery)		

TST294



Features

- .Various semiconductor DC parameters transistor, diode, triac, FET
- .Capacitor withstand voltage
- .Varistor protection voltage
- .Electrical appliance insulation
- .78 & 79 series voltage regulator
- .Neon bulb and lamp starting voltage
- .AC voltage test



TST294

Parameter	Measuring range	Display	Resolution	Operating condition
$V_{(BR)}$ Breakdown voltage	1000V	0~1000	1V	Breakdown current less than 1mA
	200V	0~199.9	0.1V	
$V_{CE(sat)}$ Collector-emitter saturation voltage drop	2A(I_c)	0~6.00	0.01	I_c approx.2000mA I_b approx.200mA
	800mA(I_c)			I_c approx.800mA I_b approx.80mA
	100mA(I_c)			I_c approx.100mA I_b approx.10mA
	10mA(I_c)			I_c approx.10mA I_b approx.1mA
	10mA(I_b)			I_c approx.10mA
hFE DC current gain	1mA(I_b)	0~1999	1	I_b approx.1mA
	10uA(I_b)			I_b approx.0.01mA
	I_{CEO} Reverse leakage current	2000 μ A	0~1999	1 μ A
78 & 79 voltage regulation	78XX/79XX	0~24.0	0.1V	
Power source	1.5V alkaline battery(AA)x4 or 6VDC/2A power supply			
Dimensions (W×H×D)	150×70×100mm			
Weight	670g			

DET4000 SERIES DIGITAL EARTH TESTER



Features

- .Conductor resistance measurement (DET4300)
- .Soil resistivity measurement (DET4300)
- .LCD background light
- .Data hold
- .Working LED indicator
- .Low battery warning
- .Function symbol display



DET4200



DET4300

Technical Data		DET4200	DET4300
Earth Resistance Test	Range	0~20 Ω , 0~200 Ω , 0~2000 Ω	0.05~2.099 Ω , 0.05~20.99 Ω 0.3~209.9 Ω , 3~2009.9 Ω 0.03k~20.99k Ω , 0.03k~209.9k Ω
	Best Accuracy	$\pm(5\% \text{ Rdg} + 2\text{digits})$	$\pm(3\% \text{ Rdg} + 5\text{digits})$
Resolution		0.01 Ω	
Earth Voltage Test	Range	0~30VAC(50/60Hz)	
	Best Accuracy	$\pm(2\% \text{ Rdg} + 5\text{digits})$	
Power Source		1.5V alkaline battery(AA)x8	1.5V alkaline battery(AA)x4
Dimensions (W×H×D)		190×75×155mm	
Weight		900g	
Accessories		one set standard earth test leads, one set simple earth test leads, one carry case	

DIT5000 SERIES DIGITAL INSULATION RESISTANCE TESTER



Features

- .Multi Test Voltage
- .Auto range (insulation only)
- .LCD background light
- .Data hold
- .Working LED indicator
- .Low battery warning
- .Function symbol display
- .AC Voltage Test



DIT5104



DIT5105

Technical Data		DIT5104	DIT5105
Test Voltage		250/500/1000/2500V	100/250/500/1000V
Insulation Resistance		0.1M Ω ~20G Ω	
Accuracy		$\pm(3\% \text{ Rdg} + 5\text{digits})$	
Resolution		0.01M Ω	
AC Voltage Test	Range	600VAC	
	Accuracy	$\pm(2\% \text{ Rdg} + 5\text{digits})$	
Power Source		1.5V alkaline battery(AA)x8	
Dimensions (W×H×D)		190×75×155mm	
Weight		900g	
Accessories		one set standard insulation test leads, one carry case	