

RuoShui®



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XI'AN BEICHENG ELECTRONICS CO., LTD.
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GENERAL CATALOG

2019

XI'AN BEICHENG ELECTRONICS CO., LTD.



For over 30 years, XI'AN BEICHENG ELECTRONICS CO., LTD, has been a leading chinese manufacturer specialising in, Digital Multimeters, Clamp-on Meters, Insulation Testers, Electrical Testers, Infrared Thermometers, Light Meters, Sound Level Meters, Thermo-Anemometers , calibrator and various measuring instruments.

Over Thirty years decades of manufacturing experience has given us the confidence to guarantee the quality of all our exports.

Our factory in Xi'an, China , spreads across five buildings occupying an area of 3.5 hectare industrial park.

Two R & D centres are on hand for customers' requirements , constantly working on and innovating new products to meet their ever- changing demands.

More than 500 employees and six production departments ensure prompt and timely deliveries.Two fully automatic production lines,The current multi-meter production capacity is 10,000 PCS per day.

Our processes and systems are setup and implemented as per ISO9001 standards.Consequently, our products are approved by UL, GS, CE and RoHS.

Let our's decades of export experience work for you. Find out more about our range of products and services and for any enquiries, please feel free to contact us today.



Production Line



Mould plant



SMT plant



Production & Quality



R&D Center



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Selection Guide of Calibrator

Model		Source												Accuracy
		V	mV	mA	T	R	O	XMT	Hz	Pulse number	Switching value	Automatic ramp		
26H	Multi-function process Calibrator(HART)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0.01	
709H	Hart LooP Calibrator				✓				✓				✓	0.01
26	Multi-function process Calibrator	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0.01	
25	Multi-function process Calibrator	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0.02	
24	Multi-function process Calibrator	✓	✓	✓	✓	✓	✓	✓	✓				✓	0.02
11+	Process Source	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0.02
14+	Temperature Calibrator	✓			✓	✓	✓							0.02
15+	Pressure Calibrator(V/mA)	✓	✓	✓					✓	✓	✓	✓	✓	0.02
01+	Temperature Calibrator	✓			✓	✓								0.05
02+	thermocouple Calibrator	✓			✓									0.05
03+	RTD Calibrator					✓	✓							0.05
04+	(V/mA) Calibrator	✓							✓					0.05
05+	LooP Calibrator								✓					0.05
Model		Measurement												
		V	mV	mA	O	TC	RTD	Pressure	Continuity	Buzzer	Pulse counter	HART	24V loop	
26H	Multi-function process Calibrator(HART)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
709H	Hart LooP Calibrator	✓										✓	✓	
26	Multi-function process Calibrator	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
25	Multi-function process Calibrator	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	
24	Multi-function process Calibrator	✓	✓	✓	✓	✓	✓	✓	✓	✓				
11+	Process Source													
14+	Temperature Calibrator	✓			✓	✓	✓			✓				
15+	(V/mA) Calibrator	✓	✓	✓				✓	✓					
01+	Temperature Calibrator													
02+	thermocouple Calibrator	✓				✓								
03+	RTD Calibrator					✓	✓							
04+	(V/mA) Calibrator													
05+	LooP Calibrator	✓		✓								✓		

26/26H

Multifunction Process Calibrators

- Input and output accuracy 0.01%.
- Input functions include: dc voltage, dc current, resistance, thermocouple, thermal resistance, frequency, pulse count, switching value, pressure, pressure leakage, etc.
- Output functions include: dc voltage, dc current, resistance, thermocouple, thermal resistance, analog transmitter output, frequency, pulse count, switching value, pressure output, etc.
- Input and output are two separate channels that can be operated simultaneously.
- With special pressure module, debug and maintain pressure equipment on site. Pressure module accuracy 0.05%.
- Support HART general instruction and general application instruction.
- It can communicate with PC, provide source code communication protocol, support secondary development, and support industrial standard SCPI command, realize remote control of instrument.
- Instrument protection grade: Ip65.
- 3.2 inch TFT display screen, multi-data display is supported.



26H

EN61326-1
EN61010-1

SPECIFICATIONS

Specification	Range	Basic Accuracy	Model	26	26H
Model		26 26H	Function		
Source			HART	✗	✓
DC millivolt	-5 ~ 110mV	0.01%+0.01%	Backlight	✓	
DC voltage	-1 ~ 11V	0.01%+0.01%	Auto Power-off	✓	
DC current	0 ~ 33mA	0.01%+0.01%	Charging function	✓	
Sink current	0 ~ 33mA	0.01%+0.01%	Room temperature display	✓	
Resistance	0 ~ 4KΩ	0.01%+0.01%	Battery detection	✓	
Thermocouple	R/S/K/E/J/T/B/N/L/U	0.4°C	The ramp signal	✓	
RTD	Pt100/Pt200/Pt500/ Pt1000/Cu10/Cu50	0.2°C	Communication function	RS232 serial communication, can realize remote control in instrument by the device	
Frequency (Hz)	1Hz ~ 110KHz	±2			
Frequency (CPM)	60~1200 CPM	±2			
Pulse	1 ~ 1000000cyc	±2			
Switch	1Hz ~ 110KHz	±2			
Pressure	Depends on the pressure module				
Measurement			General Information		
DC millivolt	-5 ~ 550mV	0.01%+0.01%	Safety	EN61010-1: 2001	
DC voltage	-0.5 ~ 35V	0.01%+0.01%	Withstand voltage	The input and output AC350V/1minutes	
DC current	-5 ~ 55mA	0.01%+0.01%	Insulation	The input and output DC500V/50MΩ	
Resistance	0 ~ 5.5KΩ	0.01%+0.01%	EMC	EN61326-1: -2006	
Thermocouple	R/S/K/E/J/T/B/N/L/U	0.7°C	Certificate	CE	
RTD	Pt100/Pt200/Pt500/ Pt1000/Cu10/Cu50	0.4°C	Display	3.2" TFT screen	
Frequency (Hz)	3Hz ~ 50KHz	±2	Powersupply	4x1.5V AA Alkaline battery	
Frequency (CPM)	180 ~ 3000000CPM	±2	Size	206 × 97 × 60 mm	
Switch	CLOSE/OPEN		Weight	about 633g	
Pressure	Depends on the pressure module		Standard Quantity Per Carton	6pcs	
Continuitybeeper	0 ~ 500Ω	=50Ωsound	Standard Carton Measurement	530mm*405mm*310mm	
Loop powersupply	24V	±10%	Standard Carton Cross Weight	12.6kg	

Calibrator Series Products



01+

02+

03+

04+

05+

EN61326-1
EN61010-1

SPECIFICATIONS

Specification	Range	Resolution	Basic accuracy					
Model	01+	02+	03+	04+	05+			
Measurement								
DC voltage	100mV	0.01mV	—	0.05%+3dgt	—	—	—	
	28V	0.001V	—	—	—	—	0.02%+2dgt	
Resistance	400Ω, 4000Ω	0.1Ω, 1Ω	—	—	0.05%+2dgt	—	—	
	Wire		—	—	2/3/4 Wire			
DC current	22mA	0.001mA	—	—	—	—	0.02%+4	
Thermocouple	E, K, J, T, N, R, S, B	0.1°C, 1°C	—	0.05%+3dgt	—	—	—	
RTD	Cu10, Cu50, Pt10, Pt100	0.1°C, 1°C	—	—	0.05%+2dgt	—	—	
Pt200, Pt500, Pt1000								
Source								
DC voltage	100mV, 1000mV	0.01mV, 0.1mV	0.05%+3dgt	0.05%+3dgt	—	—	—	
	10V	0.001V	—	—	—	0.05%+2dgt	—	
Resistance	400Ω, 4000Ω	0.1Ω, 1Ω	0.05%+2dgt	—	—	—	—	
	0~400.0Ω	0.1Ω, 1Ω	—	—	0.05%+2dgt	—	—	
DC current	22mA	0.001mA	—	—	—	0.05%+4dgt	0.05%+4dgt	
Thermocouple	E, K, J, T, N, R, S, B	0.1°C, 1°C	0.05%	0.05%	—	—	—	
RTD	Cu10, Cu50, Pt10, Pt100	0.1°C	0.05%	—	0.05%	—	—	
Pt200, Pt500, Pt1000								
Function								
Loopdeflection	The 24V loop powersupply and measuring	-	-	-	-	-	✓	
Simulating transmitter		-	-	-	✓	✓		
25%,100% step output	-	-	-	✓	✓	✓		
Automatic ramp	-	-	-	✓	✓	✓		
Automatic step	-	-	-	✓	✓	✓		
Display current and % of span	-	-	-	24V	24V			
Loop power	-	✓	✓	✓	-	-		
C~F conversion	✓	-	-	-	-	✓		
Auto Power-off	✓	✓	✓	✓	✓	✓		
Backlight	-	-	-	-	-	-		
General Information								
Power Supply	LR6(5) × 2							
Size	180×90×52							
Weight	About 400g							
Accessories	Test line, manual		Test line, manual	fuse				
Standard Quantity Per Carton	10pcs							
Standard Carton Measurement	395mm*385mm*260mm							
Standard Carton Cross Weight	9.6Kg							

Process Sources



11+

15+



SPECIFICATIONS

Source	Range	11+	14+	15+
DC millivolt	-10 ~ 1100mV -10.000 ~ 100.000mV	0.02%+0.01% 0.02%+0.01%	0.02%+0.01%	0.02%+0.01%
DC voltage	-1 ~ 11V	0.02%+0.01%	0.02%+0.01%	0.02%+0.01%
DC current	0 ~ 22mA	0.02%+0.02%	—	0.02%+0.02%
Sink current	0 ~ 22mA	0.02%+0.02%	—	0.02%+0.02%
Resistance	0 ~ 40KΩ	0.02%+0.02%	0.02%+0.02%	—
Frequency	1Hz ~ 100KHz	±2	—	±2
Pulse	1Hz ~ 10KHz	±2	—	±2
Switch	1Hz ~ 100KHz	±2	—	—
Thermocouple	10types (R/S/K/E/J/T/B/N/L/U)	0.4°C	0.4°C	—
RTD	6types (Pt100/Pt200/Pt500/ Pt1000/Cu10/Cu50)	0.2°C	0.2°C	—
Measurement				
DC millivolt	-5 ~ 550mV -20 ~ 220mV	—	0.02%+0.01%	—
DC voltage	-5 ~ 55V	—	0.02%+0.01%	—
DC current	-4 ~ 55mA	—	0.02%+0.01%	—
Resistance	0 ~ 5.5KΩ	—	0.05%+0.02%	—
Frequency	3 ~ 50KHz	—	±2	
Pressure	Dependson the pressuremodule	—	✓	
Pressure	Dependson the pressuremodule	—	✓	
Loop power supply	24V	—	—	±10%
Thermocouple	10types (R/S/K/E/J/T/B/N/L/U)	0.7°C		
RTD	6types (Pt100/Pt200/Pt500/ Pt1000/Cu10/Cu50)	0.5°C		
Continuity beeper	0 ~ 500Ω	=50Ω Sound		
Functions				
Backlight		✓	✓	
Auto Power-off		✓	✓	
Charging function		✓	✓	✓
Room temperature display		✓	✓	✓
Battery detection		✓	✓	✓
Communication function				
RS232 serial communication, can realize remote control instrument by the device driversoftware				
The mathematical treatment				
General Information				
Safety	EN610101:-2001			
Insulation	DC500V/50MΩ			
EMC	EN613261:-2006			
Certificate	CE			
Display	Doubledisplay on the LCDScreen			
Powersupply	4x1.5V AAA alkalinebattery			
Size	205 × 95 × 42 mm			
Weight	About 500g			
Standard Quantity Per Carton	10pcs			
Standard Carton Measurement	395mm*385mm*260mm			
Standard Carton Cross Weight	10.4Kg	10.3Kg	11.5Kg	

Multifunction Calibrator

- The basic accuracy of measurement and output is 0.02%, which is shown as 5 digits in measurement and 6 digits in output.
- Measurement and output are two independent channels, allowing real-time measurement and output of process.
- Multiple data displays can display input measurement values and output Settings simultaneously.
- Provide 24V loop power supply to the transmitter internally, and carry out milliamper measurement simultaneously.
- Measure ohm and thermal resistance in 2-wire and 3-wire systems.
- APM series can be equipped with 32 pressure modules of different pressure ranges. The pressure measurement range from 2.49kpa to 70MPa.
- Using the panel calibration technology, it can be calibrated without opening the housing.

**SPECIFICATIONS**

Specification	Range	Basic Accuracy	
Model		24	25
Source			
DC millivolt	-10 ~ 110mV	0.02%+0.01%	
DC voltage	-1 ~ 11V	0.02%+0.01%	
DC current	0 ~ 22mA	0.02%+0.02%	
Sink current	0 ~ 22mA	0.02%+0.02%	
External powersupply		5 ~ 28V	
Resistance	0 ~ 40KΩ	0.02%+0.02%	
Thermocouple	R/S/K/E/J/T/B/N	0.4°C	
RTD	Pt100/Pt200/Pt500/ Pt1000/Cu10/Cu50	0.2°C	
Frequency	1Hz ~ 110KHz	±2	
Pulse	1 ~ 100000cyc	—	±2
Switch	1Hz ~ 110KHz	—	±2
Pressure	Depends on the pressure module	—	✓
Measurement			
DC millivolt	-5 ~ 550mV	0.02%+0.01%	
DC voltage	-0.5 ~ 55V	0.02%+0.01%	
DC current	-5 ~ 55mA	0.02%+0.01%	
Resistance	0 ~ 5.5KΩ	0.05%+0.02%	
Thermocouple	R/S/K/E/J/T/B/N	0.7°C	
RTD	Pt100/Pt200/Pt500/Pt1000/Cu10/Cu50	0.4°C	
Frequency	3 Hz ~ 50KHz	±2	
Switch	CLOSE/OPEN	—	200 ~ 300Ω
Pressure	Depends on the pressure module	—	
Continuity beeper	0 ~ 500Ω	=50sound	
Loop powersupply	24V	±10%	
Function			
Backlight		✓	✓
Auto Power-off		✓	✓
Chargingfunction		✓	✓
Roomtemperaturedisplay		✓	✓
Battery detection		✓	✓
The ramp signal		✓	✓
RS232 serial communication		✓	✓
General Information			
Safety	EN61010-1: 2001		
Withstand voltage	The input and output AC350V/1minutes		
Insulation	The input and output DC500V/50MΩ		
EMC	EN61326-1: 2006		
Certificate	CE		
Display	Double display on the LCD screen		
Powersupply	4x1.5V AAA Alkaline battery		
Size	205 × 95 × 42 mm		
Weight	About 500g		
Standard Quantity Per Carton	10pcs		
Standard Carton Measurement	395mm*385mm*260mm		
Standard Carton Cross Weight	12.4Kg		

■ 25

**Hart Loop Calibrator**

- The highest accuracy of measurement is 0.01%, which is shown as 5 digits.
- Optional 250Ω loop resistance and supply load resistance and resistance in the circuit.
- Internal 24V loop circuit is provided.
- Support HART general instruction and general application instruction, able to read basic device information, execute diagnostic tests and microcomputer, Calibrate most HART transmitters and store profiles for up to 20 HART devices.
- Use the infrared isolation serial communication module of
- USB interface to communicate with PC, and support industrial standard SCPI command to realize remote control of the instrument .
- Water-proof :IP65.
- 3.2 inch TFT display screen.



■ 709H

SPECIFICATIONS

Specification	Range	Basic Accuracy
Source		
DC current (DCmA)	0.000 ~ 22.000mA	0.01%+0.015%
Analogtransmitter (SIMULATE)	0.000 ~ 22.000mA	0.01%+0.015%
Measurement		
DC voltage (DCV)	-2.000 ~ 28.000V	0.01%+0.01%
DC current (DCmA)	-4.000 ~ 33.000mA	0.01%+0.01%
Looppowersupply (LOOP)	24V	22mA
HART communication		✓
Functions		
Protectiongrade		IP65
Backlight		✓
Backlight brightness adjustment		✓
25%、100%step output		✓
Automatic ramp		✓
Automatic step		✓
mA、%Switch the display		✓
Auto Power-off		✓
PowerAdaptation function		✓
Battery Low display		✓
Compatible with infraredisolation USB serial communication interface		✓
General Information		
Electricalsafety	EN61010-1: 2001	
Insulation	DC500V/50MΩ	
EMC	EN613261:-2006	
Certificate	CE	
Display	3.2 inch TFT colordisplay	
Powersupply	4×1.5V AAA Alkaline battery/6Vadapter	
Size	206 × 97 × 60 mm	
Weight	About600g	

Multifunction Process Calibrators



■ 77



■ 79

EN61326-1
EN61010-1

SPECIFICATIONS

Specification	Range	Basic Accuracy			
Measurement					
Model		77	78	79	79A
DC voltage	±51V ±400V	0.50%	0.2%	0.2%	0.1%
AC voltage	510V 400V	1.50%	0.5%	0.5%	0.5%
Resistance	5kΩ 40MΩ 50MΩ	0.50%	0.20%	0.20%	0.10%
DC current	±22mA ±400mA ±500mA	0.2%	0.2%	0.2%	0.1%
AC current	400mA	—	0.50%	0.50%	0.5%
Thermocouple	R, S, B, E, K, J, T, N	—	—	0.50%	0.5%
RTD	Cu50, Pt100	—	—	0.50%	0.5%
CAP	100.0mF	—	—	—	5.0%
Frequency	10Hz~100kHz	—	✓	✓	✓
Diode test		✓	✓	✓	✓
Continuity beeper		✓	✓	✓	✓
Datahold		✓	✓	✓	✓
Relative value measurement		—	✓	✓	✓
Source					
DC voltage	-50.0mV~550.0mV -0.500V~5.500V -10.00mV~110.00mV -0.5000V~5.5000V -10.00mV~110.00mV -100.0mV~1100.0mV	—	0.20%	—	—
Resistance	0~400.0Ω	—	—	0.20%	0.2%
DC current	22mA	0.20%	0.20%	0.20%	0.2%
Simulating transmitter		✓	✓	✓	✓
25%~100% Step output		✓	✓	✓	✓
Automatic ramp		—	✓	✓	✓
Automatic step		—	✓	✓	✓
Display current and % of span		✓	✓	✓	✓
Loop power	24V 15V 15V 24V				
Frequency	1.0Hz~11.0kHz	—	✓	✓	✓
Thermocouple	R, S, B, E, K, J, T, N	—	—	✓	✓
RTD	Cu50, Pt100	—	—	✓	✓
Loop detection	The 24V loop powersupply Built-in 250 Ω HART loop resistance	✓	—	—	✓
General Information					
Power Supply	Lr6 × 2				
Auto Power-off	✓				
Backlight	N/A				
Safety	CAT IV 600V.				
Size	180×90×52				
Weight	About 400g				
Accessories	Test line, manual, fuse				
Standard Quantity Per Carton	10pcs				
Standard Carton Measurement	395mm×385mm×260mm				
Standard Carton Gross Weight	8.8Kg				



Bench Type Digital Multimeters 8145C

- Automatic, manual range
- Measure the true effective value
- Backlight
- Diode test
- Switching test
- Maximum, minimum value selection (MAX/MIN/AVG)
- Relative value measurement (REL)
- Data retention, HOLD
- Cold end temperature compensation
- Celsius, Fahrenheit temperature switch
- USB interface

SPECIFICATIONS

Specification	Range	Basic accuracy
DC voltage	200mV/2V/20V/200V/1000V	± (0.05%+4)
AC voltage	200mV/2V/20V/200V/750V	± (0.5%+40)
DC current	0.2mA/2mA/20mA/200mA/2A/10A	± (0.2%+10)
AC current	0.2mA/2mA/20mA/200mA/2A/10A	± (0.8%+30)
Resistance	200Ω/2kΩ/20kΩ/200kΩ/2MΩ/20MΩ/60MΩ	± (0.2%+5)
Capacitance	10nF/100nF/1000nF/10μF/100μF/1000μF	± (5%+5)
Frequency	10Hz~10MHz	± (0.02%+4)
Thermocouple	K index: -200.0°C~1360.0°C	± (1%+1°C)
Display words	22000	
The measurement rate	Quick: 20 times / sec Slow: 3 times / sec	
Communication bandwidth	1kHz	
The duty ratio	0.1%~99%	
The input impedance	10MΩ	
Display type	LCD	
Power Supply	220V±10%AC or 110V±10%AC, 50Hz or 60Hz	
Power	About: 3W	

Bench Type Digital Multimeters



■ 8246B



SPECIFICATIONS

Specification	Range	Basic accuracy
Model		8246A 8246B
DC voltage	50mV/500mV/5V/50V/500V/1000V	± (0.025%+5) ± (0.025%+5)
AC voltage	50mV/500mV/5V/50V/500V/750V	± (0.7%+30) ± (0.7%+30)
DC current	500uA/5000uA/50mA/500mA/5A/10A	± (0.15%+10) ± (0.15%+10)
AC current	500uA/5000uA/50mA/500mA/5A/10A	± (0.8%+30) ± (0.8%+30)
Resistance	500Ω/5kΩ/50kΩ/500kΩ/5MΩ/50MΩ	± (0.05%+5) ± (0.05%+5)
Capacitance	10nF/100nF/1000nF/10uF/100uF /1000uF/10mF/100mF	± (5%+5) ± (5%+5)
Frequency	10Hz~100kHz	± (0.02%+4) ± (0.02%+4)
Thermocouple	K Type:-200.0°C~1360.0°C	± (0.5%+0.5°C) ± (0.5%+0.5°C)
RTD	Pt100:-200.0°C~850.0°C	± (0.5%+0.5°C) ± (0.5%+0.5°C)
Display words	55000	
The measurement rate	Quick:20 times/sec; Slow:5 times/sec	
Automatic/manual range	✓	
True RMS	✓	
Bandwidth	50kHz	1kHz
The duty ratio	10%~90%	
Diode test	✓	
Continuity beeper	✓	
Four-wire resistance measurements	✓	
dBm	✓	
MAX/MIN/AVG	✓	
Relative value measurement	✓	
Data Hold	✓	
The reference junction compensation	✓	
°C/°F conversion	✓	
Change rate	✓	
Input impedance	10MΩ	
Data recording	50000 groups	
USB interface	✓	
Auto power-off	✓	
Display type	VFD	
Power Supply	220V±10%AC or 110V±10%AC, 50Hz or 60Hz	
Power	About 3W	
Safety	CAT II 300V	
Electromagnetic compatibility	IEC61326-1, Group I, Class B	
Size	245 x 220 x 82	
Weight	About 2kg	
Standard Quantity Per Carton	4pcs	
Standard Carton Measurement	650mm*390mm*370mm	
Standard Carton Cross Weight	20.2Kg	

Bench Type Digital Multimeter



■ 8245

The 8245 is a 4 1/2 digit digital multimeter with USB computer interface, memory, clock display, square wave output, vacuum screen, automatic conversion range. multimeter adopts 140 * 40mm VFD display, clear reading; with data retention, maximum / minimum value, relative value measurement function.

This table can be used to measure DC voltage and AC voltage, DC current and AC current, resistance, capacitance, temperature, diode, on-off test, square wave output, frequency and duty cycle and other parameters. The machine with the dual-integral A / D conversion of large-scale integrated circuits as the core, with automatic and manual selection function. It is an ideal tool for labs factories, radio enthusiasts and families.

SPECIFICATIONS

Basic Function	Range	Basic accuracy	Min resolution
DC Voltage	220mV/2.2V/22V/220V/1000V	± (0.05%+3)	10uV
AC Voltage	220mV/2.2V/22V/220V/750V	± (0.8%+80)	10uV
DC Current	200uA/2.2mA/22mA/220mA/10A	± (0.35%+10)	0.01uA
AC Current	200uA/2.2mA/22mA/220mA/10A	± (0.8%+80)	0.01uA
Resistance	220Ω/2.2kΩ/22kΩ/2.2MΩ/22MΩ	± (0.1%+20)	0.01Ω
Capacitance	22nF/220nF/2.2uF/22uF/220uF/2.2mF/22mF/220 mF 22.00Hz/22.000Hz/22.000kHz	± (3.5%+15)	1pF
Frequency	22Hz/220Hz/22kHz/220kHz/2.2MHz/22MHz	± (0.20%+10)	0.01Hz
Duty cycle measurement	5.0%~94.9%		
Square wave output	620Hz~9.75kHz, output amplitude:3V		
Measure frequency response	50Hz~1kHz		
AC True RMS	✓		
Diode test	✓		
On-off test	✓		
Overload protection	✓		
Input impedance	10MΩ		
Sampling frequency	2times/s		
Max display	22000(4 1/2) digital automatic polarity and unit display		
Computer interface	USB interface		
Product Size	310×230×120mm		
Power	110v/220v		



Bench Type
Digital Multimeters



■ 8155



SPECIFICATIONS

Specification	Range	Basic accuracy	8155	8165	8165A
Model			8155	8165	8165A
DC voltage	200mV/2V/20V/200V/1000V	±(0.015%+4)			
	100mV/1V/10V/100V/1000V			±(0.0015%+5)	
AC voltage	200mV/2V/20V/200V/750V	±(0.2%+100)			
	100mV/1V/10V/100V/750V			±(0.02%+100)	
DC current	200uA/2m/20m/200mA/2A/10A	±(0.05%+10)			
	10uA/100uA/1m/10m/1A/10A			±(0.005%+10)	
AC current	200uA/2m/20m/200mA/2A/10A	±(0.3%+10)			
	100uA/1mA/10m/100mA/1A/10A			±(0.03%+10)	
Resistance	200Ω/2KΩ/20KΩ/200KΩ/2MΩ/20MΩ	±(0.02%+6)			
	100Ω/1kΩ/10kΩ/100kΩ/1MΩ/10MΩ			±(0.002%+6)	
Capacitance	2nF/20nF/200nF/2uF/20uF/200uF/2mF	±(2%+5)			
	1nF/10nF/100nF/1uF/10uF/100uF/1mF/10mF			±(1%+5)	
Frequency	200Hz/2kHz/200kHz/2MHz/20MHz	±(0.1%+3)			
	3Hz~300kHz			±(0.02%+4)	
Resistance measurement	Selectable 4-wire or 2-wire ohms. Current source referenced to LO input	—		✓	
Display words		199999	199999		
LCD	480*320 TFT				
The measurement rate	Quick:20 times/sec; Slow:5 times/sec				
The duty ratio	10%~90%	✓	—	—	—
Auto power-off	✓				
Diode test	✓				
Continuity beeper	✓				
Four wire resistance measurements	✓				
dBm	✓				
MAX/MIN/AVG	✓				
Relative value measurement	✓				
Data Hold	✓				
The reference junction compensation	✓				
Change rate	✓				
SCPI	✓				
Interface	RS-232,USB Host LAN,USB Device,Trig IN/OUT IEEE 488	✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓
Input impedance	10MΩ				
Power Supply	220V±10%AC or 110V±10%AC,50Hz or 60Hz				
Power	About 3W				
Safety	CAT II 300V				
Electromagnetic compatibility	IEC61326-1,Group1,Class II				
Size	245×220×82 (mm)				
Weight	About 2kg				
Accessories	Test lead kit with probe, alligator and grabber attachments Operating manual,test report and power cord				



■ 8045-II

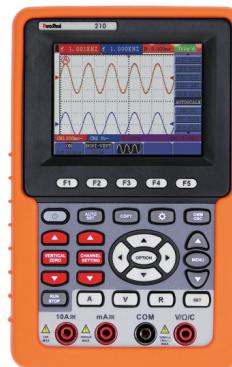


SPECIFICATIONS

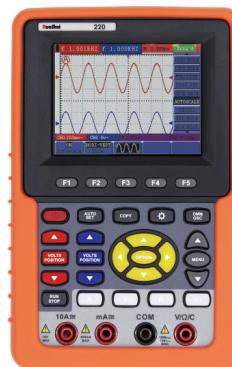
Basic Function	Range	Basic accuracy
DC Voltage	200mV/2V/20V/200V/1000V	±(0.05%+3)
AC Voltage	200mV/2V/20V/200V/750V	±(0.8%+80)
DC Current	20mA/200mA/2A/20A	±(0.35%+10)
AC Current	200mA/2A/20A	±(0.8%+80)
Resistance	2000/2KΩ/20KΩ/200KΩ/2MΩ/20MΩ	±(0.1%+5)
Frequency	20KHz/200KHz	±(1.0%+20)
Capacitance	20nF/2uF/200uF	±(3.5%+20)
Features		
Diode test	✓	
Triode test	✓	
Continuity buzzer	✓	
Overload protection	✓	
Input impedance	10 MO	
AC frequency response	3 times/s	
Sampling rate	40~50kHz	
Operation way	Manual range	
Max. Display	19999	
General Information		
Product Color	White	
Product Size	245×220×82mm	
Product Weight	Approx:1Kg	
Power Supply	AC220V/110V 50Hz/60Hz	
Standard Accessories	Test Leads / Manual / Power Cable	

Handheld Oscilloscopes

- 2 in 1 (DSO + Multimeter)
- Auto-scale Function
- FFT
- 20 group automatic measurement options
- Bandwidth : 20MHz
- USB data transmission supported
- Multimeter newly supported SCPI
- Rechargeable Li-ion battery (6 hours' backup)
- Waveform record & restore



■ 210



■ 220

EN61326-1
EN61010-1

SPECIFICATIONS

Model	220	210
Bandwidth	20MHz	
Sample Rate (realtime)	100MS/s	500MS/s
Horizontal Scale (s/div)	5ns/div~100s/div, step by 1~2.5~5	
Display	3.7" color TFT display (640 × 480 pixels)	
Channel	dual	single
Record Length	6K points	
Input Coupling	DC, AC, and GND	—
Vertical Sensitivity	5mV/div~5V/div (at input)	
Vertical Resolution (A/D)	8 bits	
Trigger Type	Edge, Video, and Alternate	Edge, and Video
Trigger Level	±6 divisions from screen center	
Acquisition Mode	Sample, Peak Detect, and Average	
Waveform Math	+,-,×,÷, invert, FFT	
Communication Interface	USB	mini-USB, mini-RS232
Power Supply	100V-240V AC, 50/60Hz	
Li-ion Battery	7.4V, 6 hours' operation	
Dimensions (W × H × D)	115 × 180 × 40 (mm)	
Weight (without package)	645.00g	
Multimeter Specifications		
Full Scale Reading	3(3/4) digit (max 4000-count)	
Input Impedance	10 MΩ	
Voltage	VDC: 400mV, 4V, 40V, 400V, 1000V: ±(1% ± 1 digit); max input: DC 1000V VAC: 4V, 40V, 400V: ±(1% ± 3 digits), 750V: ±(2% ± 3 digits); Frequency: 40Hz-400Hz; max input: AC 750V (virtual value)	
Current	DC: 40mA, 400mA: ±(1.5% ± 1 digit), 10A: ±(3% ± 3 digits) AC: 40mA: ±(1.5% ± 3 digits), 400mA: ±(2% ± 1 digit), 10A: ±(5% ± 3 digits)	
Impedance	400Ω: ±(1% ± 3 digits), 40kΩ-4MΩ: ±(1% ± 1 digit), 40MΩ: ±(1.5% ± 3 digits)	
Capacitance	51.2nF-100μF: ±(3% ± 3 digits)	

High Resolution Counter



■ 3165

- It is a high-resolution multifunction intelligent frequency counter based on microprocessor.
- Frequency, period and equal-precision measurement.
- 3-step function selection, work state, unit and 8-digit LED display.
- Continuous and adjustable gate time.
- Low frequency and other precision measurement.
- Input attenuation, AC/DC coupling select.



SPECIFICATIONS

Specification					
Frequency Measurement		CH.A measuring range:0.01Hz~50MHz, Basic accuracy:±(2×10-5+3) CH.B measuring range:50MHz~2.4GHz, Basic accuracy:±(2×10-5+3)			
Cyclic Measurement		CH.A measuring range:0.02us~10s, Sensitivity 80mVrms>1S CH.B measuring range:0.5ns~0.02us, Sensitivity 500mVrms<1S			
Cyclic Measurement Range		0.5ns~10s			
Step	Coupling	Freq. Range	Resolution		
1	AC	1GHz~2.4GHz	1kHz	100Hz	
		50MHz~1GHz (not including 1GHz)	1kHz	10Hz	
		2MHz~50MHz	1kHz	10Hz	
2	AC	100Hz~2MHz	10Hz	0.1Hz	
		0.01Hz~100Hz (not including 100Hz)	0.001Hz		
Gate Adjust Range					
100ms~10s Continuous adjustable					
Attenuation					
20dB					
Display Units					
steps, frequency, period, kHz and MHz, ms, s, etc.					
Input impedance					
1MΩ					
Display					
8 digits LED					
Operation Environment					
(-5~50)°C, 10~90% R.H.					
Storage Environment					
(-40~60)°C, 5~90% R.H.					
General Information					
Dimension					
270 × 215 × 100mm					
Weight					
Approx:1.6kg					
Power					
AC 220V/110V 50Hz/60Hz					
Standard Accessories					
Power cord /Manual /test probe					

Frequency Counter



■ 2000



EN61326-1

SPECIFICATIONS

Specification	2000
Frequency measurement	CH A: 50MHz~2.4GHz, Basic Accuracy: $\pm(1 \times 10^{-5} + 3)$ CH B: 10Hz~50MHz, Basic Accuracy: $\pm(1 \times 10^{-5} + 3)$
Crystal Oscillator	Crystal slot: 3.5MHz~16MHz, Basic Accuracy: $\pm(4 \times 10^{-6} + 1)$
Progressive Counting	CH B: 10Hz~4MHz, Basic Accuracy: $\pm(4 \times 10^{-6} + 1)$
Measurement Sensitivity	50mVrms
Input Impedance	CH A 50MΩ / CH B 1MΩ
Count Range	$1 \sim 10^6$ 10Hz/4MHz
Accuracy	$\pm(2 \times 10^{-5} R + 3D)$
Gate Time	0.1s/1s/5s/10s
Features	
8 LED display	✓
4-step gate time	✓
5 range function select	✓
Operation Environment	(-5 ~ 50) °C, 10 ~ 90% R.H.
Storage Environment	(-40 ~ 60) °C, 5 ~ 90% R.H.
General Information	
Power Supply	AC 220V/110V 50Hz/60Hz
Product Weight	1.5kg
Product Size	270×215×100mm
Standard Accessories	Power Cord/Manual/Test Probe

Function Signal Generator



■ 2002



SPECIFICATIONS

Specification	
Frequency Range	0.2Hz/2Hz/20Hz/200Hz/2kHz/20kHz/200kHz/2MHz
Amplitude Range	(2Vp-p~20Vp-p) $\pm 20\%$
Output signal impedance	50Ω
Attenuation	20dB/40dB
Duty cycle	20%~80% ($\pm 10\%$)
Display	5 digits LED frequency display 3 digits LED amplitude display synchronously
Sine wave	Distortion < 2%
Triangle wave	Linearity > 99%
Square wave	Rise edge times / fall edge times < 100nS Rise Fall pulse < 5% Vo
Time base	Symmetry frequency: 12MHz, frequency stability: $\pm 5 \times 10^{-5}$
Signal frequency stability	< 0.1% / Minute
Measurement error	$\leq 0.5\%$
Amplitude Display Units	Vp-p / mVp-p
Amplitude Display	Non-attenuate: 0.2Vp-p 20dB attenuate: 20mVp-p 40dB attenuate: 2mVp-p
Resolution	40dB attenuate: 2mVp-p
Working Temp.	(0~40) °C
General Information	
Product Size	270 mm × 215 mm × 100mm
Product Weight	Approx: 1.6kg
Power Supply	220V/110V ± 10%, 50Hz/60Hz ± 5%
Standard Accessories	Power Cable / Manual / BNC-BNC cable / BNC-Clip cable

Function Signal Generators



■ 2015H

SPECIFICATIONS

Model:	2015H	2040H	2060H
Sine wave frequency range	0~15MHz	0~40MHz	0~60MHz
Square wave frequency range	0~15MHz	0~15MHz	0~15MHz
Triangle wave frequency range	0~15MHz	0~15MHz	0~15MHz
Pulse wave frequency range	0~6MHz	0~6MHz	0~6MHz
TTL digital wave frequency range	0~6MHz	0~6MHz	0~6MHz
Arbitrary frequency range	150nS~4000S	40nS~4000S	30nS~4000S
Pulse width adjustment range	0.01μs~4000S	0.01μs~4000S	0.01μs~4000S
Square wave rise time	≤25ns	≤15ns	≤15ns
Minimum frequency resolution	0.01Hz (0.0000001Hz)		
Frequency accuracy	±20ppm		
Frequency stability	±1ppm/3hours		
Waveform type	Sine, Square ,Pulse (adjustable duty cycle, precise adjustment of pulse width and period), Triangular wave, Partial sine wave, CMOS wave, DC level (set DC amplitude by adjusting offset), Half wave, Full wave, positive staircase wave, anti-ladder wave, noise wave, exponential rise, exponential drop, multi-sonic wave, Symplectic pulse and Lorenz pulse and 60 arbitrary wave forms.		
Wave length	2048 points		
Waveform sampling rate	266MSa/s		
Waveform vertical resolution	14-bits		
Sine wave	Harmonic Suppression	≥45dBc(<1MHz); ≥40dBc(1MHz~20MHz)	
	Total harmonic distortion	<0.8% (20Hz~20kHz, 0dBm)	
Squarewave and pulse wave	Overshoot	≤5%	
Pulse wave	Duty cycle adjustment range	0.1%~99.9%	
Sine wave amplitude range	Frequency ≤ 10MHz: 10MHz ≥ Frequency ≤ 30MHz: Frequency ≥ 30MHz:	2mV~20Vpp 2mV~10Vpp 2mV~5Vpp	
Square wave, Triangle wave amplitude range	Frequency ≤ 10MHz: 10MHz ≥ Frequency ≤ 30MHz:	2mV~20Vpp 2mV~5Vpp	
Amplitude resolution	1mV		
Amplitude stability	±0.5%/5 hours		
Flatness of amplitude	±5%(<10MHz); ±10%(>10MHz)		
Output impedance	50Ω±10% (typical)		
Protection	All signal outputs can work within 60 when the load is shortcircuited		
Offset adjustment range	Output amplitude > 2V : 0.2V < Output amplitude ≤ 2V : 0 < Output amplitude ≤ 0.2V :	-9.99V~9.99V -2.5V~2.5V -0.25V~0.25V	



Function Signal Generators



■ 2040H

SPECIFICATIONS

Model:	2015H	2040H	2060H
Offset resolution	0.01 V		
Phase adjustment range	0~359.9°		
Phase resolution	0.1°		
Low level	<0.3V		
High level	1V~10V		
Level rise/fall time	≤20ns		
Frequency meter function	Range 1Hz~100MHz/Gate Time 0.01S~10s continuous adjustment		
Counter function	*Range 0~4294967295 *DC/AC Coupling Methods *Manual Operation		
Sweep type	Linearsweep, logarithmic sweep		
Sweep time	0.1s~999.9s		
Setting range	Any setting between the maximum output frequency of the corresponding model of the starting point (0.01Hz) and the end point		
Sweep direction	Forward, reverse and round trip		
Number of pulses	1~1048575		
Burst mode	Manual burst, CH2 burst, external burst (AC), external burst (DC)		
Display	2.4 inch TFT color LCD display		
Store and load	Quantity 100		
Position	00 to 99 (00 memory location parameter is loaded by default as power on)		
Arbitrary wave	Quantity 1 to 60 total 60 groups (15 groups by default as power on)		
Interface	Interface mode USB to serial interface		
Extension interface	With TTL level mode serial interface for user secondary development		
Communication speed	Adopt standard 115200bps		
Protocol	Using the command line, the protocols made public		
Power supply	Voltage range DC5V±0.5V		
Prompt tone	Users can turn on or off by setting program		
Operating characteristics	All key operations, knob continuous adjustment		
Environmental	Temperature: 0~40°C Humidity: <80%		



Selection Guide of Multimeters

SYMBOLS

 TRUE RMS	 DC Voltage	 DC+AC measurement	 Continuity buzzer
 CAT IV 600V	 AC Voltage	 MAX MIN AVG	 Diode
 DC/AC V	 DC Current (A)	 MAX MIN	 Capacitance
 DC/AC A	 AC Current (A)	 Resistance	 Temperature

Selection Guide of Multimeters

Hz	Frequency		Back light		Auto power off		Relative
dB	Decibel		LED Test		Auto power save		Inductance
DUTY	Duty cycle ratio		Peak hold		Output		USB
NCV	Non Contact Voltage		Data hold		Transistor		

Digital Multimeters

(With USB interface / 21999 Counts)

86E DCV ACV DCA ACA Ω Hz °C ← → DUTY MAX/MIN ☼ USB hFE

SPECIFICATIONSUL 61010-1
EN 61010-1
EN 61326-1**86E**

Specification	Range	Basic Function
DC Voltage	600mV/6V/60V/600V/1000V 220mV/2.2V/22V/220V/1000V	±(0.05%+8)
AC Voltage	6V/60V/600V/750V 220mV/2.2V/22V/220V/750V	±(0.5%+25)
DC Current	600uA/6000uA/60mA/600mA/6A/10A 220uA/2200uA/22mA/220mA/10A	±(0.5%+4)
AC Current	600uA/6000uA/60mA/600mA/6A/10A 220uA/2200uA/22mA/220mA/10A	±(0.8%+15)
Resistance	600Ω/6kΩ/60kΩ/600kΩ/6MΩ/60MΩ 220Ω/2.2kΩ/22kΩ/220kΩ/2.2MΩ/22MΩ/220MΩ	±(0.4%+5)
Capacitance	40nF/400nF/4uF/40uF/200uF 22nF/220nF/2.2uF/22uF/2.2mF/22mF/220mF	±(5%+50)
Frequency	100Hz/1kHz/10kHz/100kHz/1MHz/20MHz 22Hz/220Hz/22kHz/220kHz/2.2MHz/22MHz/50MHz	±(0.1%+4)
Temperature	(-20~1000)°C (0~1832)°F	±(1.0%+5) ±(1.0%+15)
Features		
Diode test	✓	
Transistor test	✓	
Continuity buzzer	✓	
Low battery indication	✓	
Data hold	✓	
Auto power off	✓	
Bar graph display	61 segment(30times/s)	
USB interface jack	✓	
Max./ Min	✓	
Function protection Shockproof	✓	
protection Frequency/duty cycle	✓ 0.1%~99.9%	
Input impedance	10MΩ	
Sampling rate AC Frequency response	3times/s (40-400)Hz	
Operation way Measuring unit	Manual/Auto range	
display	✓	
Max. display	22000	
LCD Size	70×50mm	
General Information		
Power Supply	3V(1.5V*2)	
Product Color	Case: black; Holster color: orange	
Product Weight	Approx.390g	
Product Size	192mmx95mmx48mm	
Standard Accessories	Test leads, instruction manual, TP01 temperature probe USB cable, Software CD, Transistor test accessory	
Standard Quantity packing	Color box	
Standard Gross Per Carton	30Pcs	
Weight	Approx. 23kg	

Digital Multimeters

(1999 Counts)

88B DCV ACV DCA ACA Ω Hz hFE °C ← → MAX/MIN ☼ USB RMS

88C DCV ACV DCA ACA Ω Hz °C ← → L ☼ hFE

SPECIFICATIONSUL 61010-1
EN 61010-1
EN 61010-2-030
EN 61326-1

Specification	Range	Basic accuracy
Model		88B 88C
DC Voltage	200mV/2V/20V/200V/1000V 2V/20V/200V/750V 200mV/2V/20V/200V/750V	±(0.5%+3) ±(0.5%+3)
AC Voltage	200uA/2mA/20mA/200mA/20A 2mA/20mA/200mA/20A	±(0.8%+5) ±(0.8%+5)
DC Current	20mA/200mA/20A 2mA/20mA/200mA/20A	±(1.2%+8) ±(0.8%+3)
AC Current	20mA/200mA/20A 2mA/20mA/200mA/20A	±(1.0%+5) ±(1.0%+5)
Resistance	200Ω/2kΩ/20kΩ/200kΩ/2MΩ/20MΩ/200MΩ 200Ω/2kΩ/20kΩ/200kΩ/2MΩ/20MΩ/2000MΩ	±(0.8%+3) ±(0.8%+3)
Capacitance	20nF/200nF/2uF/20uF/200uF/2000uF 20nF/200nF/2uF/20uF/200uF	±(2.5%+20) ±(2.5%+20)
Frequency	10Hz/100Hz/1kHz/10kHz/100kHz/1MHz 2kHz/20kHz/200kHz/2000kHz/10MHz	±(1.0%+10) ±(0.5%+4)
Temperature	(-20~1000)°C/(0~1832)°F	±(1.50%+3)
Inductance	2mH/20mH/200mH/2H/20H	±(2.5%+20)
Features		
Diode test	✓	✓
Continuity buzzer	✓	✓
Transistor Test	✓	✓
Max./Min Value	✓	Peak Hold
Low battery indication	✓	✓
Data hold	✓	✓
Auto power off	✓	✓
Backlight	✓	✓
Function protection	✓	✓
Restorable Fuse protection	✓	✓
Shock proof protection	✓	✓
Input impedance	10MΩ	
Sampling rate	3times/s	
AC frequency response	(40-400)Hz	
Operation way	Manual range	
Max. Display	1999	
LCD size	65×45mm	
General Information		
Power Supply	9V (6F22)	
Product Color	Case: black; Holster color: orange	
Product Weight	Approx.:320g	
Product Size	190×88.5×27.5mm	
Standard Accessories	Testleads, battery ,instruction manual,TP01 temperature probe	
Standard inner packing	Colorbox	
Standard Gross Weight	Approx.21kg	
Carton Size	465×317×506mm	
Standard Quantity Per Carton	30Pcs	

**88C****88B**

Digital Multimeters
 (5999 Counts)


■ 70D



■ 9803A+

SPECIFICATIONS

Specification	Range	Basic accuracy	
Model No.		70D	9803A+
DC Voltage	600mV/6V/60V/600V/1000V	±(0.5%+4)	
AC Voltage	6V/60V/600V/750V	±(0.8%+10)	±(0.8%+5)
DC Current	60mA/600mA/10A	±(1.0%+10)	
	60uA/600uA/6mA/60mA/600mA/6A/20A		±(1.2%+8)
AC Current	60mA/600mA/10A	±(1.5%+10)	
	60mA/6A/20A		±(2.0%+5)
Resistance	6000/6kΩ/60kΩ/600kΩ/6MΩ/60MΩ	±(0.8%+4)	
Capacitance	6nF/60nF/600nF/6uF/600uF/6000uF/60000uF	±(2.5%+20)	
	60nF/600nF/6uF/600uF/6000uF		±(3.5%+20)
Frequency	1000Hz/10kHz/100kHz	±(0.3%+2)	
	60Hz/600Hz/6kHz/60kHz/600kHz/10MHz		±(1.0%+10)
Features			
Duty Cycle		--	✓
True RMS		---	✓
Backlight		✓	✓
Electric Field		✓	---
Key-press operation		✓	---
Disoperation protection		✓	---
Diode test & Continuity buzzer		✓	✓
Low battery indication		✓	✓
Data hold		✓	✓
Auto power off/Shock proof protection		✓	✓
Square wave output		---	✓
LED test		---	✓
Unit symbol display		✓	✓
Max. Min value measurement		✓	✓
Operation Way	Auto/Manual Range	Manual Range	
Sampling rate		3times/s	
AC Frequency response		(40~400)Hz	
Max. Display	5999	5999	
LCD size	68*47mm	61*26mm	
General Information			
Power Supply	1*9V 6F22		
Product Color	Case: black; Holster color: orange		
Product Weight	Approx:330g		
Product Size	185×91×49mm	190×88.5×27.5mm	
Standard Accessories	Instruction manual, Test leads, Battery		
Standard Inner packing	Color box		

Digital Multimeters**SPECIFICATIONS**

Specification	Range	Accuracy		
Model No.		890C+	890D	890E
DC Voltage	200mV/2V/20V/200V/1000V	±(0.5%+3)	±(0.5%+3)	
	600mV/6V/60V/600V/1000V			±(0.5%+3)
AC Voltage	2V/20V/200V/750V	±(0.8%+5)	±(0.8%+5)	
	6V/60V/600V/750V			±(0.8%+5)
DC Current	200uA/2mA/20mA/200mA/20A	±(0.8%+10)		
	60uA/600uA/6mA/60mA/600mA/6A/20A			±(0.8%+10)
AC Current	20mA/200mA/20A	±(2.0%+5)	±(2.0%+5)	
	60mA/600mA/20A			±(2.0%+5)
Resistance	2000/2kΩ/20kΩ/200kΩ/2MΩ/20MΩ	±(0.8%+5)	±(0.8%+5)	
	6000/6kΩ/60kΩ/600kΩ/6MΩ/60MΩ			±(0.8%+3)
Capacitance	2nF/20nF/200nF/2uF/20uF/200uF/20mF	±(5.0%+40)	±(5.0%+40)	
	6nF/60nF/600nF/6uF/600uF/6000uF/6mF/60mF			±(2.5%+20)
Frequency	10Hz/100Hz/1kHz/10kHz/100kHz/1MHz/20MHz			±(1.0%+10)
Temperature	(-20~1000)°C	±(1.0%+5)		
Features				
Diode & Transistor test		✓		
Backlight		✓		
Continuity buzzer		✓		
Low battery indication		✓		
Auto power off		✓		
Function protection		✓		
200mA Protection		✓		
Restorable Fuse protection		✓		
TRUE RMS		✓		
Shock proof protection		✓		
Input impedance		10MO		
Sampling rate		3 times/s		
AC Frequency response		(40~1000)Hz		
Operation way		Manual Range		
Max. Display	1999	1999	5999	
LCD size		61 x 36mm		
General Information				
Battery	9V (6F22)			
Product Color	Case: black ; Holster color: orange			
Product Net Weight	Approx .400g			
Product Dimension	175*93*55mm			
Standard Accessories	Test leads, battery, instruction manual ,TP01 temperature probe (for 890C+)			



■ 890C+



■ 890D

Digital Multimeters (1999 Counts)



■ 9802A+



■ 9808+

■ SPECIFICATIONS

Specification	Range	Best Accuracy	
Model No.		9802A+	9808+
DC Voltage	200mV/2V/20V/200V/1000V	$\pm(0.5\%+3)$	
AC Voltage	2V/20V/200V/1000V	$\pm(0.8\%+5)$	
	200mV/2V/20V/200V/750V	$\pm(0.8\%+5)$	
DC Current	200uA/200uA/2mA/20mA/200mA/2A/20A	$\pm(1.2\%+8)$	
	200uA/2mA/20mA/200mA/20A	$\pm(0.8\%+10)$	
AC Current	200mA/2A/20A	$\pm(1.5\%+15)$	
	200mA/2mA/20mA/200mA/20A	$\pm(0.8\%+5)$	
Resistance	2000/2kΩ/20kΩ/200kΩ/2MΩ/200MΩ	$\pm(0.8\%+3)$	
	2000/2kΩ/20kΩ/200kΩ/2MΩ/20MΩ/200MΩ	$\pm(0.8\%+3)$	
Inductance	2mH/20mH/200mH/2H/20H	$\pm(2.5\%+30)$	
Capacitance	20nF/200nF/2uF/20uF/200uF/2000uF	$\pm(3.5\%+20)$	
Frequency	10Hz/100Hz/1kHz/10kHz/100kHz/1MHz/10MHz	$\pm(1.0\%+3)$	
Features			
Diode/Transistor		✓	
Continuity Buzzer		✓	
Live wire judging		✓	---
Low battery indication		✓	
True RMS		✓	
Data Hold		✓	
Auto power off		✓	
Backlight		✓	---
Max.Min value measurement		---	✓
Relative measurement		---	✓
Square wave output		✓	---
Input impedance		10MΩ	
Sampling rate		3 times/s	
AC Frequency response		40-1000Hz	
Operation way		Manual range	
Max. Display		1999	
LCD Size		70*50mm	
General Information			
Power Supply	9V(6F22)		
Product Color	Case: black ; Holster color: orange		
Product Net Weight	Approx.320g		
Product dimension	190*88.5*27.5mm		
Standard Accessories	Test leads , battery ,instruction manual		



Digital Multimeters (19999 Counts)



■ SPECIFICATIONS

Specification	Range	Best Accuracy	
Model No.		9807A+	980+
DC Voltage	200mV/2V/20V/200V/1000V	$\pm(0.1\%+5)$	
AC Voltage	200mV/2V/20V/200V/750V	$\pm(0.8\%+25)$	
DC Current	200uA/2mA/20mA/200mA/2A/20A	$\pm(0.5\%+4)$	
	200uA/2mA/20mA/200mA/20A	$\pm(0.5\%+4)$	
AC Current	200mA/2A/20A	$\pm(1.5\%+15)$	
	200mA/2mA/20mA/200mA/20A	$\pm(1.5\%+25)$	
Resistance	2000/2kΩ/20kΩ/200kΩ/2MΩ/200MΩ	$\pm(0.4\%+5)$	
	2000/2kΩ/20kΩ/200kΩ/2MΩ/20MΩ/200MΩ	$\pm(0.3\%+5)$	
Conductance	(0.1~100)nS	$\pm(1.0\%+30)$	
Capacitance	20nF/200nF/2uF/20uF/200uF/2000uF	$\pm(4.0\%+50)$	
Frequency	20Hz/200Hz/2kHz/20kHz/200kHz/2MHz	$\pm(0.1\%+3)$	
Features			
Diode/Transistor		✓	
Continuity Buzzer		✓	
Low battery indication		✓	
True RMS		✓	
Data Hold		✓	
Auto power off		✓	
Backlight		✓	---
Input impedance		10MΩ	
Sampling rate		3 times/s	
Operation way		Manual range	
Max. Display		19999	
LCD Size		70*50mm	
General Information			
Power Supply	9V(6F22)		
Product Color	Case: black ; Holster color: orange		
Product Net Weight	Approx. 422g		
Product dimension	190x88.5x27.5mm		
Standard Accessories	Test leads , battery ,instruction manual		



■ 980+



■ 9807A+

Digital Multimeters

(3999 Counts)

97

**SPECIFICATIONS**

Basic Function	Range	Basic accuracy
DC Voltage	400mV/4V/40V/400V/1000V	±(0.5%+4)
AC Voltage	400mV/4V/40V/400V/750V	±(0.8%+10)
DC Current	400uA/4000uA/40mA/400mA/10A	±(1%+10)
AC Current	400uA/4000uA/40mA/400mA/10A	±(1.5%+10)
Resistance	400Ω/4kΩ/40kΩ/400kΩ/4MΩ/40MΩ	±(0.8%+4)
Capacitance	10nF/100nF/1uF/10uF/100uF/1mF/10mF/100mF	±(3.5%+8)
Frequency	100Hz/1000Hz/10kHz/100kHz/1MHz/30MHz	±(0.5%+10)
Temperature	(-20~1000)°C/(-4~1832)°F	±(1.0%+5)
Features		
Max. Display	3999	
Diode	✓	
Transistor	✓	
Continuity buzzer	✓	
Low battery indication	✓	
Backlight	✓	
Data Hold	✓	
REL value	✓	
True RMS	✓	
Auto power off	✓	
Analog bar graph	✓	
Shockproof protection	✓	
Duty Cycle	1%~99%	
Input impedance	10MΩ	
Sampling rate	3 times/s	
AC Frequency response	40~400Hz	
Operation way	Auto Range/Manual Range	
LCD size	70×50mm	
General Information		
Battery	9V 6F22	
Product Color	Case: black; Holster: orange	
Product Net Weight	Approx:420g	
Product Dimension	190×93.5×37mm	
Standard Accessories	temperature probe/Battery Test leads/instruction manual/TP01	
Standard inner packing	Color box	
Standard Quantity Per Carton	40Pcs	
Carton size	465×175×506mm	
Standard Gross Weight	Approx:22kg	

**Digital Multimeters**

(22000 Counts, Data logger)

**SPECIFICATIONS**

Specification	Range	Basic accuracy
Model		98A+/98C+
DC Voltage	200mV/2V/20V/200V/1000V	±(0.5%+4)
AC Voltage	200mV/2V/20V/200V/1000V	±(0.5%+40)
DC Current	200uA/2000uA/20mA/200mA/2A/10A	±(0.2%+10)
AC Current	200uA/2000uA/20mA/200mA/2A/10A	±(0.8%+30)
Resistance	200Ω/2kΩ/20kΩ/200kΩ/2MΩ/20MΩ/60MΩ	±(0.2%+5)
Capacitance	10nF/100nF/1000nF/10uF/100uF/1000uF/10mF/100mF	±(5.0%+5)
Frequency	10Hz~10MHz	±(0.02%+4)
Temperature	Kindexing:(-200.0~1360.0)°C	±(1%+1)
RTD	Pt100:(-200.0~850.0)°C	±1%+0.5
Features		
Max. Display	22000	
Sampling Rate	3 times/s	
Analog Bar Graph	20 times/s	
Operation way	Auto/Manual range	
True RMS	✓	
Bandwidth	1kHz	
Duty cycle measurement	0.1%~99.9%	
Diode test	✓	
Continuity beeper	✓	
dBm	✓	
MAX/MIN/AVG	✓	
Relative Value Measurement	✓	
Data hold	✓	
Auto hold	✓	
Peak hold	✓	
The reference junction compensation	✓	
°C/°F conversion	✓	
Input impedance	10MΩ	
Data Recording	1000 Group	
Auto power off	✓	
Backlight	✓	
Online communication	USB interface/Support SCPI	2.4GHz wireless Module
General Information		
Power Supply	AAA(1.5×4)	
Product color	Case: black; Holster color: orange	
Product Weight	500g	
Product Size	205×95×42mm	
Standard Accessories	Manual, Test Lead, 2.4GHz wireless Module(for 98C+) Software CD	
Standard inner packing	Color box	
Standard Quantity Per Carton	10Pcs	



98A+



98C+

Digital Multimeters
True RMS Datalogging Multimeters



■ 189A

■ SPECIFICATIONS

Specification	Range	Basic Accuracy
Model		189A
DC voltage	50mV/500mV/5V/50V/500V/1000V	± (0.025%+5)
AC voltage	50mV/500mV/5V/50V/500V/750V	± (0.7%+30)
DC current	500uA/5000uA/50mA/500mA/5A/10A	± (0.15%+10)
AC current	500uA/5000uA/50mA/500mA/5A/10A	± (0.8%+30)
Resistance	50Ω/500Ω/5kΩ/50kΩ/500kΩ/5MΩ/50MΩ	± (0.05%+5)
Capacitance	10nF/100nF/1000nF/10μF/ 100μF/1000μF/10mF/100mF	± (5%+5dgt)
Frequency	10Hz~100kHz	± (0.02%+4dgt)
Thermocouple	Kinexing:-200.0°C~1360.0°C	± (0.5%+0.5°C)
RTD	Pt100: -200.0°C~850.0°C	± (0.5%+0.5°C)
Features		
Display words	55000	
The measurement rate	Fast: 20 times / sec	
Analog Bargraph	The fastest rate: 20 times / sec	
Automatic/manual range	✓	
Measure the true effective value	✓	
Bandwidth	50kHz	
Duty cycle ratio	0.1%~99%	
Diode test	✓	
Continuity beeper	✓	
dBm	✓	
Low pass filter	✓	
MAX/MIN/AVG	✓	
Relative value measurement	✓	
Data Hold	✓	
Auto Hold	✓	
Peak Hold	✓	
The reference junction compensation	✓	
°C/°F conversion	✓	
Changerate	✓	
Input impedance	10MΩ	
Data recording	Manual: 1000 Groups; Auto: 1000 Groups;	
USB	standard USB connector, 2.4G wireless communication	
SCPI	✓	
Auto power-off	✓	
Display type	LCD	
Backlight	✓	
General Information		
Power Supply	4×AAA alkaline batteries	
Safety	CAT IV 600V . CAT III 1000V	
Electromagnetic compatibility	IEC61326-1, Group1, Class B	
Size	206×97×60mm	
Weight	About 500g	
Standard Quantity Per Carton	10pcs	
Standard Carton Measurement	395mm×385mm×260mm	
Standard Carton Cross Weight	11.3Kg	



9205 DC V AC V DC A AC A Ω °C → MAX MIN
9208 DC V AC V DC A AC A Ω Hz °C ← → DUTY

■ SPECIFICATIONS

Specification	Range	Best Accuracy
Models No.		9205 9208
AC Voltage	2V/20V/200V	±(0.8%+8)
	750V	±(1.2%+15)
DC Voltage	200mV/2V/20V/200V	±(0.5%+4)
	1000V	±(0.8%+15)
AC Current	200mA	±(2%+15)
	10A	±(3.5%+15)
DC Current	200uA/2mA/20mA/200mA	±(1.5%+10)
	200mA	±(1.5%+10)
	10A	±(2.5%+15)
Resistance	2000	±(0.8%+5)
	2kΩ/20kΩ/200kΩ/2MΩ	±(0.8%+3)
	20 MΩ	±(1.0%+25)
	200 MΩ	±(5.0%+30)
Capacitance	20nF/2μF	±(2.5%+20)
	200μF	±(5.0%+10)
Frequency	2kHz/200kHz	±(3.0%+18)
Temperature	(-20 ~ -70)°C	±(1.0%+10)
Features		
Diode & Continuity Test	✓	
Data hold	✓	
Triode Test	✓	
Operation way	Manual	
Low battery indication	✓	
Auto power off	✓	
Overload protection	✓	
Backlight	✓	
Max Display	2000	
LCD Size	60x35mm	
General Information		
Power Supply	9V 6F22	
Product Color	Black + Orange	
Product Weight	About 220g	
Product Size	172x80x38mm	
Standard Accessories	Test leads , battery ,instruction manual ,TP01(for 9208)	



■ 9205



■ 9208

Digital Multimeters (Auto detection)

85A DC V AC V DC A AC A Ω →

85B DC V AC V DC A AC A Ω Hz ← →



85A



85B

SPECIFICATIONS

Specification	Best Accuracy	
Models No.	85A	85B
AC Voltage	200mV/2V/20V/200V	±(1.2%+5)
	300mV/3V/30V/300V	±(1.2%+5)
	600V	±(1.5%+5) ±(1.5%+5)
DC Voltage	200mV/2V/20V/200V	±(0.8%+2)
	300mV/3V/30V/300V	±(0.8%+5)
	600V	±(1.0%+2) ±(1.0%+2)
AC Current	20mA/200mA/2A/10A	±(2%+5)
	30mA/300mA/10A	±(2.0%+5)
	20mA/200mA/2A/10A	±(1.2%+5)
DC Current	20mA/200mA/2A/10A	±(1.2%+5)
	30mA/300mA/10A	±(1.2%+5)
	2000/2kΩ/20kΩ/200kΩ/2MΩ	±(1.0%+3)
Resistance	3000/3kΩ/30kΩ/300kΩ/3MΩ	±(1.0%+5)
	20 MΩ	±(2%+5)
	30 MΩ	±(1.2%+5)
Capacitance	3nF/30nF/300nF/3μF/30μF/300μ	±(3.0%+5)
	3mF/30mF	±(5.0%+5)
	Frequency	3kHz/30kHz/100kHz
Features		
Models	85A	85B
Diode & Continuity Test	√	√
Data hold	√	√
Auto Detection	V/A/OHM/Diode/Continuity Test	V/A/OHM/Diode/Continuity Test/Hz/CAP
Operation way	Auto/Manual	
Low battery indication	√	√
Auto power off	√	√
Overload protection	√	√
Backlight	√	√
Max Display	2000	3000
Double Fuse	F500mA/250V F40A/250V	
General Information		
Power Supply	1.5V(AA)x2	
Product Color	Black + Orange	
Product Weight	About 320g	
Product Size	172x85x45mm	
Standard Accessories	Test leads, battery, instruction manual	

Digital Multimeters (Mini version)830L DC V AC V DC A Ω →
921 DC V AC V Ω Hz → DUTYEN61326-1
EN61010-1

921

SPECIFICATIONS

Specification	Range	Basic accuracy
Model:	830L 921	
DC Voltage	200mV/2V/20V/200V/600V	±(0.5%+4)
	400mV/4V/40V/400V/600V	±(0.5%+4)
AC Voltage	200V/600V	±(1.2%+10)
	400mV/4V/40V/400V/600V	±(0.5%+4)
DC Current	200μA/2000μA/2mA/20mA/200mA/10A	±(1.5%+3)
Resistance	2000/2kΩ/20kΩ/200kΩ/2MΩ	±(0.8%+5)
	4000/4kΩ/40kΩ/400kΩ/4MΩ/40MΩ	±(0.8%+4)
Frequency	100Hz/1000Hz/10kHz/100kHz/1MHz/10MHz	±(0.5%+4)

Features

Diode test	√	√
Continuity buzzer	√	√
Low battery indication	√	√
Data Hold	√	√
Auto power off	√	√
Max. value measurement	√	√
Shock proof protection	√	√
Frequency	√	√
Duty cycle measuring		√
Input impedance	10MΩ	
Sampling rate	3 times/s	
AC frequency response	(40-400)Hz	
Operation way	Manual range/Auto range	
Max. Display	1999 3999	
LCD size	57×33mm 55×43mm	

General Information

Battery	9V(6F22)	3V (1.5×2)
Product color	Case: black, Holster color: orange	
Product Net Weight	Approx. : 150g	Approx.:140
Product Dimension	145×85×30mm	124×80×20mm
Standard Accessories	Test leads / battery /instruction manual	
Standard inner packing	Color box	Color box
Standard Quantity Per Carton	60Pcs	64Pcs
Carton Size	470×325×350mm	290×255×390mm
Standard Gross Weight	Approx. : 16.4 kg	Approx.:10kg



830L

Digital Multimeters

(Mini version)

201 DCV ACV DCA Ω → °C

202 DCV ACV DCA Ω → °C



■ 201



■ 202

SPECIFICATIONS

Basic Function	Range	Basic Accuracy
Model	201	202
DC Voltage	200mV/2V/20V/200V/500V	±(0.5%+2)
AC Voltage	200V/500V	±(1.2%+10)
DC Current	200uA/200mA/10A 2mA/20mA/200mA/10A	±(1.0%+2) ±(1.0%+2)
Resistance	200Ω/2kΩ/20kΩ/200kΩ/2MΩ 200Ω/2kΩ/20kΩ/200kΩ/20MΩ/200MΩ	±(0.8%+5) ±(0.8%+5)
Battery Test	1.5V/9V/12V	±10mV
Features		
Max Display	1999	
Diode test	✓	✓
Backlight	✓	✓
Data Hold	✓	✓
Continuity	✓	✓
Low Battery Indication	✓	✓
200mA protection	✓	✓
Square wave output	—	✓
Input Impedance	5MΩ	
Frequency Response	(40-400)Hz	
Operation way	Manual Range	
General Information		
Power Supply	9V 6F22	
Product Color	Body: black / House: orange	
Product Weight	160g	
Product Size	150mm × 73.5mm × 35mm	
Standard Accessories	User's Manual, Batteries, Test leads	

EN61326-1
EN61010-1**6013**

Range	Resolution	Max. displaying in the range	Measuring frequency	Accuracy
200pF	0.1pF	199.9 pF	800Hz	
2nF	1pF	1.999nF	800Hz	
20nF	10pF	19.99nF	800Hz	
200nF	100pF	199.9nF	800Hz	±(0.5%+7)
2μF	1000pF	1.999μF	800Hz	
20μF	0.01μF	19.99μF	80Hz	
200μF	0.1μF	199.9μF	8Hz	
2000μF	1μF	1999μF	8Hz	±(2%+5)
20000μF	10μF	1999(x10)μF	8Hz	±(3%+10)

Features

Low battery indication	✓
Data Hold	✓
Backlight	✓
Auto power off	✓
Shock protection	✓
Sampling time	0-5s
Zero Adjustment	✓
Operation way	Manual Range
Max. Display	1999
Operation Temp. & humidity	(0-40)°C / <80%

General Information

Power Supply	9V(6F22)
Product Weight	About 400g
Product Size	189x88.5x27mm
Standard Accessories	Alligator clips ,battery ,instruction manual
Standard inner packing	Color box

6243

Range	Resolution	Measuring frequency	Via.voltage	Accuracy
2nF	1pF	1kHz	150mV	±(1.0%+5)
200nF	100pF	1kHz	150mV	
2μF	1nF	1kHz	150mV	±(2.0%+5)
20μF	10nF	100Hz	150mV	
200μF	10nF	100Hz	15mV	
1000μF	10nF	100Hz	15mV	for referenceonly
Inductor			Via.current	
2mH	1uH	1kHz	150uA	±(2.0%+5)
20mH	10uH	1kHz	150uA	
200mH	100uH	1kHz	150uA	
2H	1mH	100Hz	150uA	±(5.0%+5)
20H	10mH	100Hz	15uA	±(5.0%+15)

Features

Low battery indication	✓
Data Hold	✓
Auto power off	✓
Sampling time	0-5s
Operation way	Manual Range
Max. Display	1999

General Information

Power Supply	9V(6F22)
Product Weight	About 400g
Product Size	189x88.5x27mm
Standard Accessories	Alligator clips ,battery ,instruction manual

LCR Meters

■ 6013



■ 6243

LCR Meters

4091A/4091C



■ 4091A/4091C



SPECIFICATIONS

Model	4091A	4091C
Basic measurement accuracy (See details in technical specification)	0.2%	0.2%
LCRZ	0.2%	
DCR		✓
Electrolytic Capacitor Mode		✓
Test signal frequency	10Hz-10kHz,adjustable	10Hz-100kHz,adjustable
Test parameters	L/C/R/Z X/D/Q/θ/ESR	
DCR display range	0.0001 Ω –99.999 MΩ	
LCR parameters display range	R 0.0001Ω-99.99MΩ C 0.01pF - 99.999μF L 0.01uH - 9999H	
Display digits	3.5" TFT,5	
Measurement time (≥10 kHz)	Fast: 8 meas/sec, Medium:4 meas/sec(90 ms, Slow:2 meas/sec	
Equivalent circuit	Serial/Parallel	
Backlight Adjustable	✓	
Components Auto identification	✓	
Operation Way	Auto / Manul range	
Correction	Open/ Short	
Language	English/Chinese	
Filter	-50%–5+50% (Fix point 1%,5%,10%20%)	
Max/Min/Ave.	✓	
SCPI	Support	
Interface	USB , RS232 (or 485), Handle / (GPIB USB HOST Available)	
Comparator	3 Levels for PASS 1 Level for FAIL 1 Level for AUX	
General Information		
Power Supply	AC 110V-220,45~65Hz	
Product Size	265mmx305mmx105mm	
Product Weight	2.3Kg	
Standard Accessories	Manual/Power Cable/Test Lead	

4090A/4090B/4090C



■ 4090A/4090B/4090C



SPECIFICATIONS

Specification	4090A	4090B	4090C
Model	4090A	4090B	4090C
Basic Accuracy	0.20%		
LCRZ			
Electrolytic Capacitor Mode	✓		
DCR Mode	✓		
Test Signal Frequency	10Hz-10kHz,10points 100Hz,120Hz,200Hz, 400Hz,800Hz,1KHz,2KHz 4KHz,8KHz,10KHz	100Hz-20KHz,12 points 100Hz,120Hz,200Hz, 400Hz,800Hz,1KHz,2KHz 4KHz,8KHz,10KHz 15KHz,20KHz	100Hz-100Khz,16 points 100Hz,120Hz,200Hz, 400Hz,800Hz,1KHz,2KHz 4KHz,8KHz,10KHz 15Khz,20Khz,50Khz 80Khz,100Khz
Electrical Level	6 fixed points :0.1V/0.3V/0.6V/1V/1.5V/2V		
Test Parameters	L/C/R/Z X/D/Q/θ/ESR		
DCR Range	0.0001Ω-99.999MΩ		
LCR Parameters Range	R: 0.0001Ω-99.999MΩ C: 0.01pF-99.999mF L: 0.01uH-9999H D: 0.0001-9.9999 Q: 0.0001-9999.9 θ(DEG) -179.9-179.9°		
Screen	3.5" TFT,5 digits		
Measurement Time(≥10kHz)	Fast :8meas/s,Medium:4meas/s,Slow:2meas/s		
Equivalent Circuit	Serial/Parallel		
Backlight Adjustable	✓		
Language	English/Chinese		
Correction	Open/ Short		
Comparitor	3 Levels for PASS 1 Level for FAIL 1 Level for AUX		
Max/Min/Ave.	✓		
Interface	USB , RS232,RS485(optional),GPIB(optional)		
General Information			
Power Supply	AC 110V-220,45~65Hz		
Product Size	265mmx305mmx105mm		
Product Weight	3.5kg		
Standard Accessories	Manual/Power Cable/Test Lead		

Handheld LCR Meters

EN61326-1

SPECIFICATIONS

Specification		
Model No.	4080	4082
LCRZ	✓	✓
Electrolytic Capacitor Mode	✓	✓
DCR Mode	✓	✓
Test Signal Frequency	100Hz,120Hz,1KHz,10KHz,40KHz,100Khz	100Hz-100Khz, adjustable
Electrical Level	0.6V rms、0.3V rms、0.1V rms	0.1-1.1V adjustable
Bias Voltage	—	0-500mV
Test Parameters	L/C/R/Z X/D/Q/θ/ESR	
R	0-20MΩ	
C	0-20μF	
L	0-2000H	
Features		
Screen	2.8" TFT; 5 digits	
Measurement Time(≥10kHz)	Fast :4meas/s, Medium:2meas/s, Slow:1meas/s	
Equivalent Circuit	Serial/Parallel	
Correction	Open/Short	
Filtering	1%-50% (fix point:1%, 5%,10%,20%)	
Backlight Adjustable	✓	
Data Recording	✓	
Data Logging	✓	
Auto Power Off	✓	
Comparator	✓	
LCD Size	55x35mm	
Interface	USB	
General Information		
Power Supply	5V Lithium Battery	
Product Size	188mmx90mmx33mm	
Product Weight	0.95kg	
Standard Accessories	Manual/Software CD/Charger/USB Cable/Test Lead/Short-circuit Plate	

**Digital Clamp Meter****Four key points in choosing a suitable model**

1. What are objects to be measured?
Models to be chosen differ depending on what you intend to measure, AC current, DC current or leakage current.

2. Measurable conductor size
A wide range of sizes are available from 21mm to 150mm in diameter according to measurable conductor sizes and measuring places.

3. Is true RMS measurement required?
A clamp meter of the mean-value type cannot provide accurate results in the measurement of an inverter circuit and a motor circuit having many distortions. To make measurements for such circuits, a clamp meter of the true RMS type is required.

4. Other functions
Other types are available featuring a tester function and recorder output function in addition to current measurement.

True RMS measurement

A clamp meter of the mean value type detects the mean value of sine waves in AC measurement, multiplies the value 1.11 times (sine wave AC) and indicates it as the effective value. It even indicates the waveform of a distorted wave and the non-sine wave with different form factors in values multiplied 1.11 times, so indication errors occur as a result. For these measurements, use a clamp meter of the true RMS type that detects and indicates the true RMS value itself.

Measurement of leakage current

Unlike ordinary current measurement, it is required to clamp all two wires (two-wire single-phase) or three wires (three-wire single-phase or three-wire three-phase) for measuring leakage current. The earthing wire also can be measured.

Clamp Meters



■ 606B



■ 606C



SPECIFICATIONS

Specification	Range	Best Accuracy		
Models		606A	606B	606C
AC Voltage	2V/20V/200V	±(0.8%+10)		
	400mV/4V/40V/400V		±(0.8%+10)	
	4V/40V/400V			±(0.8%+10)
	600V	±(1.0%+10)	±(1.0%+10)	±(1.0%+10)
DC Voltage	200mV/2V/20V/200V	±(0.5%+4)		
	400mV/4V/40V/400V		±(0.5%+4)	±(0.5%+4)
	600V	±(1.0%+6)	±(1.0%+6)	±(1.0%+6)
AC Current	2A/20A	±(2.5%+8)		
	4A/40A		±(2.5%+8)	
	40A/600A			±(2.5%+8)
	200A/600A	±(2.5%+8)		
DC Current	400A/600A		±(2.5%+8)	
	2000A/2kΩ/20kΩ/200kΩ/2MΩ	±(1.0%+5)		
Resistance	400Ω/4kΩ/40kΩ/400kΩ/4MΩ		±(1.0%+5)	±(1.0%+5)
	20 MΩ	±(1.2%+10)		
Capacitance	40 MΩ		±(1.2%+10)	±(1.2%+10)
	2nF/20nF/200nF/2μF/20μF/1000μF	±(5.0%+8)		
Frequency	4nF/40nF/400nF/4μF/40μF/1000μF		±(5.0%+8)	±(5.0%+8)
	0~10MHz	±(0.3%+3)	±(0.3%+3)	
Temperature	(-20~400)°C / (-4~752)°F		±(3.0%+2)	
Features				
Models	606A	606B	606C	
Diode & Continuity Test	✓	✓	✓	
Data hold	✓	✓	✓	
Max./Min.	✓	-	-	
NCV Measurement	✓	✓	✓	
True RMS	✓	✓	✓	
Operation way	Auto	Manual/Auto	Auto	
Low battery indication	✓	✓	✓	
Auto power off	✓	✓	✓	
Overload protection	✓	✓	✓	
Backlight	✓	✓	✓	
Max Display	2000	4000	4000	
AC frequency response	50~60Hz			
Sampling Rate	3times/second			
Jaw Size	32mm			
LCD Size	35x24mm			
General Information				
Power Supply	1.5V(AAA)x2			
Product Color	Black + Orange			
Product Weight	About 220g			
Product Size	193x73x37mm			
Standard Accessories	Test leads, battery, instruction manual, temperature probe (for 606B)			

Clamp Meters



SPECIFICATIONS

Specification	Range	Accuracy	
Model No.		6056A+	6056B
DC Voltage	400mV/4V/40V/400V/1000V	±(0.5%+4)	
AC Voltage	400mV/4V/40V/400V/750V	±(0.8%+10)	±(0.8%+10)
AC Current	40A/400A/1000A	±(2.5%+8)	
DC Current	40A/400A/1000A	±(2.5%+8)	
Resistance	4000/4kΩ/40kΩ/400kΩ/4MΩ	±(0.8%+4)	
Capacitance	4nF/40nF/400nF/4μF/40μF/1000μF	±(3.0%+10)	
Frequency	10nF/100nF/1μF/10μF/100μF/1000μF	±(3.0%+10)	±(3.0%+10)
	9.999Hz/99.99Hz/999.9Hz/9.999kHz/ 99.99kHz	±(0.5%+4)	
Capacitance	9.999Hz/99.99Hz/999.9Hz/9.999kHz/ 99.99kHz/999.9kHz		±(0.5%+4)
	99.99kHz/999.9kHz		
Features			
Diode / Continuity Test		✓	
Low Voltage Indication		✓	
True RMS	---		✓
Unit Symbol Display		✓	
Data Hold		✓	
Auto Power Off		✓	
Overload Protection		✓	
Sampling Rate		3 times/s	
AC Current Response		(50~60)Hz	
Operation Way		Auto Range	
Max. Display		3999	
Jaw Size		55mm	38mm
General Information			
Power	9V (6F22)		
Product Color	Black + Orange		
Product Weight	410g	270g	
Product Size	257x82x40mm	225x76x32mm	
Accessories	Test Leads, Battery, Instruction Manual		



■ 6056A+



■ 6056B

Clamp Meters



■ 610B



■ 610C

SPECIFICATIONS



Specification	Range	610B	610C	Best Accuracy
Models No.		610B	610C	
AC Voltage	4V/40V/400V/750V			±(1.0%+10)
	2V/20V/200V/750V			±(1.0%+10)
DC Voltage	200mV/2V/20V/200V/1000V			±(0.5%+7)
	400mV/4V/40V/400V/1000V			±(0.5%+7)
AC Current	2A/20A/200A/1000A			±(4.0%+10)
	40A/400A/1000A			±(4.0%+10)
DC Current	40A/400/1000A			±(4.0%+10)
	2000/2kO/20kO/200kO/20 MO			±(1.0%+5)
Resistance	4000/4kO/40kO/400kO/4MO/40 MO			±(1.0%+5)
	4nF/40nF/400nF/4uF/40uF/4000uF/1mF			±(5.0%+10)
Frequency	0-10MHz			±(0.3%+3)
Features				
Models	610B	610C		
Diode & Continuity Test	√	√		
Zero Function	√	---		
Data hold	√	√		
Max./Min.	√	---		
NCV Measurement	√	√		
True RMS	√	√		
Operation way	Auto	Auto		
Low battery indication	√	√		
Auto power off	√	√		
Overload protection	√	√		
Backlight	√	√		
Max Display	4000	2000		
AC frequency response		50-60Hz		
Sampling Rate		3times/second		
Jaw Size		32mm		
LCD Size		35x24mm		
General Information				
Power Supply	1.5V(AAA)x2			
Product Color	Black+ Orange			
Product Weight	About 250g			
Product Size	193x73x37mm			
Standard Accessories	Test leads , battery ,instruction manual			

Clamp Meters



SPECIFICATIONS

Specification	Range	Accuracy		
Model No.		6016A+	6016B+	
DC Voltage	200mV/2V/20V/200V/600V	±(0.5%+4)		
	500V		±(0.8%+5)	
AC Voltage	200mV/2V/20V/200V/600V	±(0.8%+10)		
	500V		±(1.2%+5)	
AC Current	2A/20A/200A/600A	±(3.5%+10)		
	2000mA/20A/200A/600A		±(2.0%+10)	
Resistance	2000/2kO/20kO/200kO/2MO/20MO	±(0.8%+5)		
	2000MO		±(1.0%+5)	
Features				
Diode Test		√		
Continuity Test		√		
Low Voltage Display		√		
Auto Negative Indication	---	√		
Data Hold		√		
Max Hold	√	---		
Auto Power Off		√		
Function Protection		√		
Input Impedance		10MO		
Sampling Rate		3 times/s		
AC Current Response		(50-60)Hz		
Operation Way		Auto Range		
Max. Display		1999		
Jaw Size	32mm	30mm		
General Information				
Power		1.5V x 2		
Product Color		Case: black; Holster: orange		
Product Weight		Approx.180g		
Product Size	210x76x37mm	165x68x28mm		
Accessories	Test Leads, Battery, Instruction Manual			



■ 6016A+



■ 6016B+

Clamp Meters



■ 6016C

SPECIFICATIONS



Specification	Range	Accuracy
Model No.		6016C 3218+
DC Voltage	200mV/2V/20V/200V/1000V	±(0.5%+4)
	200mV/2V/20V/200V/600V	±(0.5%+3)
AC Voltage	2V/20V/200V/750V	±(0.8%+10)
	2V/20V/200V/600V	±(0.8%+5)
DC Current	200uA/2000uA/20mA/200mA	±(1.2%+3)
AC Current	2A/20A/200A/1000A	±(2.5%+8)
	200uA/2000uA /20mA/200mA/ 2A/20A/ 200A/500A	±(1.8%+3)
Resistance	2000/2kΩ/20kΩ/200kΩ/2MΩ/20MΩ	±(0.8%+4)
Features		
Diode & Continuity test		✓
Low battery indication		✓
Data Hold		✓
Max Hold		✓
Auto power off		✓
Operation way		Auto range
Max. Display		1999
Jaw Size	38mm	30mm
General Information		
Power Supply	1.5V*2	
Product color	Black+ Orange	
Product size	225x76x32mm	195x60x36mm
Product Net Weight	Approx:265g	170g
Standard Accessories	Test leads, battery, instruction manual	



■ 3218+

High/Low Voltage Leakage Clamp Meters



SPECIFICATIONS

Specification	9000	9000B
Model No.	9000	9000B
Function	High/Low voltage AC current Leakage current On-line AC current test	
Transmission Distance	N/A	Wireless transmission, Max. distance 30m
Measuring Range	0.00mA~1200A (50/60Hz automatic)	
Resolution	0.01mA	
Accuracy	0.00mA~299mA: ±1%±3	
	0.30A~9.99A: ±1.5%±5	
	10.0A~199.9A: ±2%±5	
	200A~399A: ±2.5%±5	
	400A~600A : ±3%± 5	
	601A~1200A: ±4%± 5	
Sampling Speed	2times/S	
Live Voltage	Under 60KV insulated wire test (Test with insulation rod) Under 35kV bare wire	
Features		
Data Storage	99 Groups	
Peak Hold	✓	
Date Hold	✓	
Overflow Indication	✓	
Auto Power Off	✓	
Clamp Size	ø48mm	
Display	4 digits LCD ,47*28.5mm	
Backlight	✓	
Low Battery Indication	✓	
Insulation Strength	AC 100kV/rms (between the 5th insulation rod and the clamp center)	
Working Condition	(-25~40)°C; below 80%Rh	
Storage Condition	(-10~60)°C; below 70%Rh	
General Information		
Power Supply	1.5V AAA*4	Main Unit:1.5V AAA*4 Clamp : 1.5V AAA*4
Product Size	76mmx255mmx31mm	Main Unit:78mm×165mm×42mm Clamp : 76mm×255mm×31mm
Product Weight	3450g	Main Unit:330g Clamp : 335g
Insulation Rod Size	ø32mm,1m/pc x5pcs	
Standard Accessories	Insulation Rod(1m)x5	Receiver x1; Clamp x1
	Battery; Manual Pouch	Insulation Rod(1m)x5 Battery; Manual; Pouch



■ 9000

9000C/9000D

Hook Type High /Low Voltage Leakage Meters



■ 9000C

Specification		
Model No.	9000C	9000D
Function	High/Low voltage AC current ,Leakage current ,Frequency, Transformer Core earthing current , Suitable for leakage current checking of mine and multi-core large cable	
Measuring Range	AC 0~6000A (50/60Hz Auto)	AC 0~20000A (50/60Hz Auto)
Frequency	45Hz~75Hz	
Resolution	10mA,0.1Hz	
Accuracy	0.00A~99.9A: ±2%±5 100A~6000A: ±3%±5 N/A 6.00kA~20.0kA : ±4%± 5	
Frequency Accuracy	±1Hz	
Sampling Speed	2times/S	
Live Voltage	Under 35kV bare wire Under 110KV insulated wire test (Test with insulation rod)	
Transmission	433MHz wireless , 150 meters	
Features		
Display	3.5inch Color LCD	
Data Storage	9999 Groups	
Peak Hold	√	
Date Hold	√	
Overflow Indication	√	
Auto Power Off	√	
Measurable Cable	Φ168mm Cable/ 168mmx245mm busbar	
Operation Way	Auto Range	
Insulation Rod Length	1M x 5pcs	
Backlight	√	
Low Battery Indication	√	
Insulation	AC 100kV/rms (between the 5th insulation rod and the clamp center)	
Working Condition	(-25~40)°C; below 80%Rh	
Storege Condition	(-10~60)°C; below 70%Rh	
General Information		
Power Supply	3.7V Rechargeable lithium battery	
Product Size	Main Unit:250mm×100mm×40mm Clamp : 310mm×270mm×52mm	
Product Weight	Main Unit:395g Clamp : 496g Insulation Rod : 1.45g Total : 11.5kg	
Standard Accessories	Receiver x1pc,Clamp x1pc,Aerialx2pcs,Insulation Rod(1m)x5pcs,USB Cable+Charger x 1pc,Battery,Manual,Tool Case	

7100/7100A

Large Diameter Leakage Current Clamp Meters



■ SPECIFICATIONS

Specification		
Model No.	7100	7100A
Function	AC Leakage Current Big Current	
Measuring Range	AC 0.0mA~3200A	
Resolution	AC 0.1mA	
Accuracy	0.0mA~499mA: 2%+5 500A~999A: 3%+5 1000A~2999A: 4%+5 3000A~4000A: 5%+ 5	
Sampling Speed	2times/S	
Frequency	50Hz/60Hz Auto	
Live Voltage	Under AC600V	
Features		
Data Storage	99 Groups	
Peak Hold	√	
Date Hold	√	
Backlight	√	
Overflow Indication	√	
Low Battery Indication	√	
Auto Power Off	√	
Clamp Size	108mmx148mm	
LCD Size	47*28.5mm	
Interface	RS232	
Working Condition	(-10~40)°C; below 80%Rh	
Storege Condition	(-10~60)°C; below 70%Rh	
General Information		
Power Supply	1.5V AAA*4	
Product Size	350mmx180mmx55mm	
Product Weight	1920g	
Standard Accessories	RS232 Cable/Battery/Manual/Pouch/Software CD	



■ 7100A

Power Clamp Meters

■ 7300
■ 7300A



SPECIFICATIONS

Specification	Range	Basic accuracy
Model	7300	7300A
Function	Measure three phase AC voltage, leakage current, current, active power, reactive power, apparent power, power, phase between current and voltage, phase between phase voltage, frequency, power energy, phase sequence.	
Current Range	AC 0.00mA-1200A, Resolution: 0.01mA	AC 0.00mA-2000A, Resolution: 0.01mA
Power Range	AC 0.5W-720KW, Resolution: 0.01W	AC 0.5W-1200KW, Resolution: 0.1W
Voltage Range	AC 0-600V, Resolution: 0.01V	
Frequency Range	25Hz-100Hz, Resolution: 0.1Hz	
Phase Range	0.0°-360.0°, Resolution: 0.1°	
Power Factor Range	0.3-1.0(Capacitive or inductive), Resolution: 0.001	
Power Energy Range	0.0000KWh-72000KWh, Resolution: 0.0001KWh	
Features		
Display	LCD: 43mm×29mm	
Clamp Size	80mm×80mm	
Data Storage	200 Groups	
Interface	Rs232	
Frequency	50Hz ,60Hz(auto)	
Operation Way	Automatic Range	
Sample Rate	2 times/s	
Line Voltage	< AC 600V	
Backlight	✓	
Data Hold	✓	
Over Range Indication	"OL" Displays	
Auto Off	15 minutes idle	
Low Battery Indication	✓	
Working Current	50mA with backlight ; 25mA without backlight	
Working Condition	-10°C-40°C; 80%rh	
Insulation strength	-10°C-60°C; below 70%rh	
Safety	IEC1010-1, IEC1010-2-032, 2 class of pollution, CAT III(600V)	
General Information		
Power Color	Case: black, Holster color : orange	
Power Supply	1.5VAAA×4	
Product Size	275mm ×145mm × 40mm	
Product Weight	About 1Kg	
Standard Accessories	Test Wiresx4pcs, (Yellow, Green, Red, Black), RS232 Cable x1pc, CD x1pcs;	

Clamp Leaker



■ 140



EN61010-1
EN61010-2-032
EN61326-1

SPECIFICATIONS

Specification	Range	Basic accuracy
Model	140	
Function	Measurement of: AC leakage current ,AC current ,on-line AC current	
Resolution	0.01mA	
Current Range	0.00mA ~ 300.0A (50/60Hz)	
Measuring Range	30mA/300mA, 30A/300A	
Voltage Range	AC 0-600V, Resolution: 0.01V	
Line voltage	Line Voltage< AC600V	
Accuracy	0.00mA ~ 9.99mA: ±1.2%±5 10.0mA ~ 300.0mA: ±1.5%±5	
(at 23°C±1°C, <70%RH)	0.00A ~ 9.99A: ±1.2%±5 10.0A ~ 99.9A: ±1.5%±5 100.0A ~ 199.9A: ±2%±5 200.0A ~ 300.0A: ±4%±5	
Features		
Display	4 digits LCD :32x15mm	
Clamp Size	Φ40mm	
Sampling Rate	2 times/s	
Low Battery Indication	✓	
Rated Power	5mW	
Data Hold	✓	
Over range indication	✓	
Auto Off	15 minutes idle	
Insulations	AC2kV/rms (between core and box)	
Working Current	50mA with backlight ; 25mA without backlight	
Working Condition	-10°C-40°C; 80%rh	
Storage Condition	-10°C-60°C; below 70%rh	
Safety	IEC1010-1, IEC1010-2-032, 2 class of pollution, CAT III(600V)	
General Information		
Power Color	Case: black, Holster color : orange	
Power Supply	Button Cell LR-44×2 or SR-44×2	
Product Size	64mm×160mm×23mm	
Product Weight	About 120g	
Standard Accessories	Manual , Battery	

Hook Type Leakage Current Meter

■ 7100B

SPECIFICATIONS

Specification	Range	Basic accuracy
Model	7100B	
Function	Measure AC Current , AC leakage current, Load Current Perfect for Leakage Current of mine and Multi-core Large cables	
Resolution	10mA	
Current Range	AC 0.0-9999A (50/60Hz Auto)	
Line voltage	< 1000V bare wire < 10kV insulated wire (test with insulation rod)	
Accuracy (23°C±5°C, <80%RH,)	0.00A-999A ±2% ±5 1000A-2999A ±3% ±5 3000A-9999A ±4% ±5	
Features		
Operation Way	Automatic Range	
Test Mode	Clamp CT , Hook on the cable	
Measurable Cable	Φ168mm Cable/ 168mmx245mm busbar	
Sample Rate	2 times/s	
Display	4 digital LCD display, 47x28.5mm	
Data Hold	√	
Backlight	√	
Over Range Indication	√	
Auto Off	15 minutes idle	
Low Battery Indication	AC2kV/rms (between core and box)	
Insulation	Insulation Rod : AC 3kV/rms Main Unit : 2000V/rms	
Working Condition	-10°C-40°C; 80%rh	
Storage Condition	-10°C-60°C; below 70%rh	
Safety	IEC1010-1, IEC1010-2-032, 2 class of pollution, CAT III(600V)	
General Information		
Power Color	Case: black, Holster color : orange	
Power Supply	3.7V Rechargeable lithium battery	
Product Size	310mm × 270mm × 52mm	
Product Weight	About 496g	

**Leakage Current Meters****SPECIFICATIONS**

Specification	Range	Basic accuracy
Model	6800	690
Function	AC Leakage Current AC Current On-line Measurement	AC Leakage Current Large AC Current
Resolution	0.01mA	10mA
Measuring Range	AC 0.0-1200A (50/60Hz Auto)	0.00mA ~ 9999A (50/60Hz automatic)
Voltage Range	AC 600V	
Sampling Speed	2times/S	
Accuracy (23°C±5°C, <80%RH,)	0.00mA~59.9A: 1.5%+5 60A~199A: 2%+5 200A~599A: 3%+5 600A~1200A: 4%+ 5	±2%+3
Features		
Data Storage	99 Groups	
Peak Hold	√	
Coil Length/Coil Dianmeter	628mm / Φ7.5mm	
Sample Rate	2 times/s	
LCD Size	35*21.5mm	
Data Hold	√	
Backlight	√	
Over Range Indication	√	
Clamp Size	Φ 68mm	Φ 200mm
Auto Off	15 minutes idle	
Low Battery Indication	√	
Interface	USB (Data storage/On-line monitoring) —	
Working Condition	0°C-40°C; 80%rh	-10~40°C; below 80%Rh
Storage Condition	-10°C-60°C; below 70%rh	
Overflow Indication	√	
General Information		
Standard Accessories	USB Cable(only for 6800)/Software CD(only for 6800)/Battery/Manual/Pouch	
Power Supply	9V F22	
Product Size	224mmx115mmx43mm	190mmx370mmx40mm
Product Weight	About 500g	About 200g



Insulation Resistance Testers

What is Insulation Resistance Tester?

The measurement of insulation resistance is performed to check the insulation status of electric equipments and circuits, which constitutes one of the important measuring items for safety control. The measurement of the insulation of electric equipments and circuits is made using an insulation resistance tester by stopping the operation of the electric equipments and circuits (by stopping power distribution). Voltage of several megohms to tens of megohms is measured in case of the measurement of insulation resistance of electronic parts and electric equipments, and voltage of $1\text{ M}\Omega$ or less is measured in case of electric works for interior wiring and others.

Is not the resistance range of a multimeter adequate for the measurement of insulation resistance?

The resistance of a digital multimeter or multimeter covers the applied voltage (measured voltage) of approx. 0.3V up to 12V. An insulation resistance tester needs to make measurements at voltage higher than the working voltage of a circuit and electric and electronic equipment to be measured. The table on the right lists examples of rated voltage and uses of the insulation resistance tester.

Examples of major applications of insulation resistance tester

Rated measurement voltage	General electric equipments	Electric equipments and circuits
25V 50V	Insulation measurement of telephone circuit equipments and explosion-proof equipments	Insulation measurement of telephone circuits
100V 125V	Insulation measurement of control equipments	Insulation measurement for maintaining and controlling low-voltage distribution wiring and equipments of 100V class or lower Insulation measurement for maintaining and controlling low-voltage wiring and equipments of 200V class or lower
250V	Insulation measurement of low-voltage distribution circuits and equipments	Insulation measurement for maintaining and controlling low-voltage wiring and equipments of 400V class or lower Insulation measurement of 100V, 200V and 440V classes at the time of new installation
500V	Insulation measurement of newly installed distribution circuits, and circuits and equipments of 600V or less (General)	Insulation measurement for maintaining and controlling low-voltage wiring and equipments of lower than 600V Insulation measurement of 100V, 200V and 400V distribution wiring at the time of new installation
1000V	Insulation measurement of circuits, equipments, and facilities of higher than 600V (General)	Insulation measurement of equipments normally used in high-voltage working voltage (e.g. high-voltage cable, high-voltage electric equipment, and communications equipment using high voltage)

60B+/60D+/60E+

Digital Insulation Testers



■ 60B+



■ 60E+



■ 60D+



SPECIFICATIONS

Specification	Range	Basic accuracy	60B+	60D+	60E+
Model					
Measuring Voltage	250V/500V/1000V 1000V/2500V 2500V/5000V	$\pm(4\%+2)$ $\pm 10\%$ $\pm 10\%$			
Measuring resistance	200M Ω /20G Ω /200G Ω	$\pm(5\%+5)$	$\pm(5\%+5)$	$\pm(5\%+5)$	$\pm(5\%+5)$
Current of short circuit	1mA	✓	✓	✓	✓
AC voltage	750V	$\pm(1\%+6)$	$\pm(1\%+6)$	$\pm(1\%+6)$	$\pm(1\%+6)$
Features					
Low Battery Indication	✓				
Backlight display	✓				
Alarm Function	Red indicator light is illuminated				
Over Load Indication	✓				
Unit Symbol Display	✓				
Auto Power Off	✓				
Max. Display	1999				
LCD size	84.8×59.8mm				
Using Temperature	(0~40)°C				
Relative Humidity	30%RH~85%RH				
Input Impedance	1M Ω				
Frequency Response	(50~200) Hz				
Over Range Display	"1"				
General Information					
Power Color	Case: black, Holster color : orange				
Power Supply	9V(6x1.5V AA) / AC adapter (not included)				
Product Size	175×110×70mm				
Product Weight	About 630g				
Standard Accessories	Test leads / battery /instruction manual/shoulder strap				

Digital Insulation Testers



3125



SPECIFICATIONS

Basicfunction	3123	3125
250V	Resistance range	0~2.50GΩ
	Resistance accuracy	5%
	Ratedcurrent	1mA
500V	Resistance range	0~5.00GΩ
	Resistance accuracy	5%
	Ratedcurrent	1mA
1000V	Resistance range	0~9.99GΩ
	Resistance accuracy	5%
	Ratedcurrent	1mA
2500V	Resistance range	0~99.9GΩ
	Resistance accuracy	5%
	Rated current	1mA
5000V	Resistance range	0~1.2TΩ
	Resistance accuracy	<100G : 5% >100G : 20%
	Rated current	1mA
The leakage current measurement	0~1500uA	
Shortcircuit current	About1.3mA	
Polarization index (PI)	√	
Inducedabsorption ratio(DAR)	√	
Step voltage(SV)	500V/1000V/1500V 2000V/2500V	500V/1000V/1500V/2000V 1000V/2000V/3000V/4000V
The timing measurement(TIME)	√	
The output voltage monitor	√	
Automatic release voltage	√	
Temperature measurement	Range	0~70.0°C
Voltage test	DCRange	0~1000V
	ACRange	30~600V
Storage	Manual: 260groups /Auto:500groups	
Onlinecommunication	USB/SCPI	
The system time	The date + 24h time	
Battery detection	√	
Auto Power - off	√	
Backlight	√	
Size	210mm(L)×155mm(W)×95mm(D)	
Weight	1750g	
Enclosure protection	IP40	
Power supply	1.5V(LR14)×8	
Overload	Insulationresistance: AC1200V/10S Voltage range: AC720V/10S	
Withstand voltage	AC3250V(50/60Hz)/5S	
Insulation resistance	1000MΩ or greater/DC1000V	

Phase Detector



850C



850D



SPECIFICATIONS

Model No.	850C	850D
Function	1,phase sequence detection (normal phase, reverse phase and phase deficiency) 2,live wire examination 3,simple power detection 4,Breakpoint location 5,Line maintenance	
Live Voltage Range	AC70~1000V , 45~65Hz (Sine wave continuous input)	
Clampable Wire Diameter	ø1.6-ø16mm	ø10-ø40mm
LED Indication	[Positive phase sequence] the four phase-sequence lamps blink in order (clockwise) [Negative phase sequence] the four phase-sequence lamps blink in order (counterclockwise) [Live-voltage indication] L1, L2, L3 lamps light up [Default phase] L1/L2/L3 lamp is off [Open circuit] L1/L2/L3 lamp is off	
Buzzer	[Positive Phase Sequence] beeps intermittently [Negative Phase Sequence] beeps continuously	
Power Indication	√	
Magnetic Hooker on back	√	
Auto Power Off	5 minutes idle	
Clamp Lead Length	0.6m	
Max. Measure Voltage	AC1000V	
General Information		
Power Supply	1.5V AA x 2	
Product Size	70mmx75mmx30mm	
Product Weight	200g	
Standard Accessories	Manual,Battery	

Digital Phase Volt-Ampere Meters**Advantages**

- Specifically designed for field testing .
- Perfect for electric power, petroleum chemical industry , metallurgy , railway , and meteorology , industrial and mining enterprises , scientific research institutions , measurement section and so on .
- Especially suitable for the electricity billing system and relay protection system.

**■ 4000M****■ 4100****■ 4500****■ 4200****Digital Phase Volt-Ampere Meters****SPECIFICATIONS****Specification**

Model No.	4000M	4100	4200	4500
Range	Resolution/ Accuracy			
Phase : 0~360°	1°±3°	1°±1°	0.1°±1°	0.1°±1°
Voltage: AC 0~600V	0.01V/±2%±3	0.01V/±1.2%±2	0.01V/±0.5%	0.01V/±0.5%
Current : AC 0mA~20A	---	0.1mA/±1.0%±2	0.1mA/±0.5%	0.1mA/±0.5%
Current : AC 0.00mA~30.00A(50/60Hz auto)	0.01mA/±2%±3	---	---	---
Frequency:45.00Hz~65.00Hz	---	---	0.01Hz/±1%	0.01Hz/±1%
Frequency : 1.0Hz~400.0Hz	0.1Hz/±1%	---	---	---
Active Power:0.0W~12kW	---	---	0.1W/±1%	0.1W/±1%
Reactive Power:0.0VAR~12kVAR	---	---	0.1VAR/±1%	0.1VAR/±1%
Apparent Power:0.0VA~12kVA	---	---	0.1VA/±1%	0.1VA/±1%
Power Factor:-1~+1	---	---	0.001/±0.03	0.001/±0.03
Current Vector:0mA~60A	---	---	---	1mA/-

Features

Clamp Size	Φ7.5mm×13mm		
Display	4digitsLCD 35mm×21.5mm LCD with backlight (70mm×62mm)		
Backlight Brightness Adjustment	---		
Operation Way	Auto Range	Manual Range	
Sample Rate	3 times/s		
Data Store	99 groups	---	99 groups
Data Hold	√		
Auto Power Off	15 minutes idle		
Low Battery Indication	√		
Test Leads Length	---	1.5m	
Clamp Probe Length	---	2m	
Interface	---	USB	
Operation Condition	(-10~40) °C; <80%Rh		
Storage Condition	(-10~60) °C ; <70%Rh		

General Information

Power Supply	9V 6F22	Main Unit:1.5V AA x6	Main Unit: Rechargeable lithium battery
		Probe : 9V 6F22	Probe : 9V 6F22
Product Size	220mm×45mm×30mm	Main Unit:196mm×92mm×54mm / Probe :220mm×45mm×30mm	
Product Weight	170g	Main Unit:350g / Clamps :170g/ Test Leads : 125g	
Standard Accessories	Manual, Battery, Pouch Test Leads x2,Clamp x2, Charger+ USB cable ,Software CD, Tool Case,	Manual, Battery, Pouch Test Leads x2,Clamp x2, Charger+ USB cable,Software CD, Tool Case,	Manual,Battery,Pouch Test Leads x3,Clamp x3,Charger + USB cable,Software CD,Tool Case,

Digital Earth Resistance Testers



■ 4105A



■ 4105B

■ SPECIFICATIONS



Specification	Range	Resolution	Basic Accuracy
Model			4105A 4105B
Ground Resistance	20Ω	0.01Ω	±(2%+0.1)
	200Ω	0.1Ω	±(2%+3)
	2000Ω	1Ω	±(2%+3)
	10Ω	0.01Ω	±(3%+0.1)
	100Ω	0.1Ω	±(2%+3)
	1000Ω	1Ω	±(3%+8)
	200V	0.1V	±(2.0%+6)
Ground current (AC current)	750V	0.1V	±(5.0%+5)
Features			
Low Battery Indication	✓		
Backlight display	✓		
Over Load Indication	✓		
Unit Symbol Display	✓		
Auto Power Off	✓		
Max. Display	1999		
LCD size	84.8×59.8mm		
Using Temperature	(0~40)°C		
Relative Humidity	30%RH~85%RH		
Input Impedance	1MΩ		
Frequency Response	(50~200) Hz		
Over Range Display	"1"		
General Information			
Power Color	Case: black, Holster color : orange		
Power Supply	8x1.5V AA / DC 12V adapter (not included)		
Product Size	175×110×70mm		
Product Weight	About 630g		
Standard Accessories	Pouch bag x1		
	Ground drill rod x2		
	Auxiliary testing wire x1set(15M red wire/10M yellow wire/5M green wire)		
	Simple testing wire x1 set(1.6M red wire/1.6M green wire)		
	Battery (LR 6 AA) (1.5V) x8		

Digital Earth Resistance Testers



■ 4106



■ 4109

■ SPECIFICATIONS

Model	Range	Resolution	Basic Accuracy
4106	20	0.001Ω	4109
4106	200	0.01Ω	±(2%+20)
4106	2000	0.1Ω	±(2%+5)
4106	20000	1Ω	±(2%+2)
4106	20KΩ	0.01KΩ	±(3%+5)
4106	0~50V	0.1V	±(5.0%+5)
Resistance Coefficient "p"	200.m(0.0.m~19.99 O.m)	0.01O.m	Depend on RG P=2XpxaxRG a:1.0~30meter
	2000.m(100.0 O~199.9 O.m)	0.1O.m	
	20000.m(2000.m~1999 O.m)	10.m	
	20kO.m(2.00 kO.m~19.99 KO.m)	0.01kO.m	
	200kO.m(20.0 kO.m~199.9 KO.m)	0.1kO.m	
	2000kO.m(200 kO.m~3768KO.m)	1kO.m	
Features			
Low Battery Indication	✓		
Backlight display	✓		
Over Load Indication	✓		
Unit Symbol Display	✓		
Auto Power Off	✓		
Max. Display	1999		
LCD size	84.8×59.8mm		
Operation Condition	(0~40) °C / 30%-85%RH		
Input Impedance	1MΩ		
Frequency Response	(50~200) Hz	94Hz,105Hz,111Hz,128Hz	
Over Range Display	"1"		
General Information			
Power Color	Case: black, Holster color : orange		
Power Supply	8x1.5V (AA) / DC 12V adapter (not included)		
Product Size	175×110×70mm		
Product Weight	About 630g		
Standard Accessories	Pouch x1; Ground drill rod x2		
	Auxiliary testing wire x1set(15M red wire/10M yellow wire/5M green wire)		
	Simple testing wire x1 set(1.6M red wire/1.6M green wire)		
	Battery (LR 6 AA) (1.5V) x8		
	Instruction manual x1; Shoulder Strap x1		

Earth Resistance & Resistivity Tester



4108

SPECIFICATIONS



Measuring function		
RE Measurement pile method	2pole / 3pole / 4pole	
RE Measurement selective electrode method	3 pole + single clamp	
	4 pole + single clamp	
Double Clamp method	✓	
Soil Resistivity	✓	
Equipotential Resistance measurement	✓	
Interference measurement	Disturbance Voltage(AC/DC)	
Clamp Current measurement	Interference Frequency	
Test Frequency(Hz)	94/105/111/128 (Auto / Manual)	
Output	Um	40Vrms sine
	Im	250mA
	Um-dc	20Vdc
	Im-dc	250mA
Parameter	Range	Accuracy
Re(Rg)	0.02Ω ~ 199.9kΩ	2%+5
Single Clamp	0.02Ω ~ 19.99kΩ	5%+5
Double Clamp	0.02Ω ~ 100Ω	10%+2
Rdc	0.02Ω ~ 199.9kΩ	2%+2
Current (IST)	1.0mA~20.0A	5%+5
ρ	0 ~ 3768kΩ·m	---
Features		
Grounding Resistance (Rs) Testing	✓	
Auxiliary Grounding Resistance (Rh) Testing	✓	
Remove the test function of Rk	✓	
LIMIT Alarm	✓	
Continuity Beep	✓	
Battery detection	✓	
Auto Power-off	✓	
Display	240 * 128 dot matrix / with backlight	
RTC	✓	
Storage	✓	
Communication	Infra-red USB	
General Information		
Power Supply	LR6 * 8 / charger	
Accessories	Pouch, Tool Case, Manual, Software CD, Test Ring, USB Cable, Batteries, Adaptor, Gound Rod, Piles x 4	
	Testing Leads(Black:6m x 1; Green:6mx1; Red:15mx1; Blue:30mx1)	
Product Size	210×155×95	
Product Weight	About 900g	

Clamp Earth Resistance Testers



SPECIFICATIONS

Specification		
Model No.	6412	6412+
Function	Ground Resistance Test AC Current	Ground Resistance Test
Measuring Range	0.01Ω~0.99Ω : ±1%+0.01 0.10Ω~0.99Ω : ±1%+0.01 1.0Ω~49.9Ω : ±1.5%+0.1 50.0Ω~99.5Ω : ±2%+0.5 100Ω~199Ω : ±3%+1 200Ω~395Ω : ±6%+5 400Ω~590Ω : ±10%+10 600Ω~1000Ω : ±20%+20	AC Current
AC Current Range	0-80mA : ±2.5%+1mA 80mA-650mA: ±2.5%+2mA 650mA-4A : ±2.5%+10mA 4A-30A : ±2.5%+20A	—
Single Measurement Time	1s	0.5s
Current Measure Frequency	50/60Hz Auto	—
Range for alarm of current	1 -499mA	1-999mA
Range for alarm of resistance	1-199Ω	1-1500Ω
Features		
Data Storage	99 groups	999 groups
Alarm Beeping	✓	
Interference Indication	Beeps / NOISE symbol blinking	Beeps + LCD light
Date Hold	✓	
Overflow Indication	✓	
Auto Power Off	✓	
Double Insulation	✓	
Time Display	—	✓
Interface	—	USB on-line monitoring
Range	Auto Range	
Clamp Size	65mmx32mm	
LCD Size	47*28.5mm / 4 digits	47*28.5mm / color LCD
Working Condition	(-10~55)°C; below 10%-90%RH	
General Information		
Power Supply	1.5V AAA*4	
Product Size	300mm(L) X 90mm(W) X 66mm(H)	
Product Weight	1320g	
Standard Accessories	Testing Ring/Battery/Manual/Tool Case /USB Cable + Software DC (only 6412D)	



6412



6412+

Clamp Earth Resistance Tester



6415

■ SPECIFICATIONS



Basicfunction 6415				
Function		4-pole,3-pole,2-pole,selection,double clamp method measure grounding resistance,Soil Resistivity;Earth Voltage,AC Voltage,AC Leakage Current		
Parameters	Range	Accuracy	Resolution	
Selection Method (0.00Ω~3000Ω)	0.00Ω~30.00Ω 30.00Ω~300.0Ω 300Ω~3000Ω	±2%rdg±3dgt	0.01Ω 0.1Ω 1Ω	
Double Clamp Method (0.00Ω~9000kΩ)	0.01Ω~1.00Ω 1.0Ω~10.0Ω 10Ω~100Ω 0.00Ω~30.00Ω 30.00Ω~300.0Ω 300Ω~3000Ω 3.00kΩ~30.00kΩ	±10%rdg±5dgt	0.1Ω 0.01Ω 1Ω 0.01Ω 0.1Ω 1Ω 10Ω	
2/3/4 Pole Method (0.00Ω~30.00kΩ)	0.00Ω~30.00Ω 30.00Ω~300.0Ω 300Ω~3000Ω 3.00kΩ~30.00kΩ	±2%rdg±3dgt	0.01Ω 0.1Ω 1Ω 10Ω	
Soil Resistivity (0.00Ω~9000kΩ)	0.00Ωm~99.99Ωm 100.0Ωm~999.9Ωm 1000Ωm~9999Ωm 10.00kΩm~99.99kΩm 100.0kΩm~999.9kΩm 1000kΩm~9000kΩm	According to the precision of R ($\rho = 2\pi aR$, $a:1 m$ -100m, $\pi=3.14$)	0.01Ωm 0.1Ωm 1Ωm 10Ωm 100Ωm 1KΩm	
Earth Voltage	0.0V~100.0V	±2%rdg±3dgt	0.1V	
AC Current	0.00mA~600A	±2%rdg±3dgt	0.01mA	
Measuring Mode	Precise 4-pole measurement, 3-pole measurement, simple 2-pole measurement, selection method, double clamp method			
Measuring Method	2/3/4 pole method: change-pole method, measurement current 20mA Max Selection method: change-pole method, measurement current 20mA Max Soil Resistivity: 4-pole measurement (Wenner method) Earth Voltage: average rectification(between P(S)-ES) AC current: mutual inductance method			
Test Frequency	128Hz/111Hz/105Hz/94Hz(AFC)			
Short-circuit Test Current	AC 20mA max			
Open-circuit Test Current	AC 40V max			
Test Voltage Wave	Sine wave			
Electrode Distance Range	1m-100m			
Operation Way	Auto Range			
Display	4-digital large LCD ,124mmx67mm			
Clamp Size	Φ68mm			
Measuring Times	Over 5000 times(interval time should be at least 30 seconds)			
Interface	Rs232			
General Information				
Power Supply	R14S 1.5V 6 PCS			
Product Size	215mm×190mm×95mm			
Product Weight	Total weight: 8.0kg (including package) Tester: 1653g (including battery) Testing wires: 1560g Auxiliary earth rods: 935g (4pcs)			
Standard Accessories	Clamp x2pcs , Manual x 1pc , Test Wires (red 20m, black 20m, yellow 10m, green 10m) ,Short Test leads (red 1.6m, black 1.6m) , RS232 Cable + Software CD x 1pc , Tool Case x 1pc			

Equipotential Bonding & DC Low Resistance Testers



■ 3700B

■ SPECIFICATIONS

Model No.	3700B	3700C	3700D
Function	Test of equipotential bonding resistance between functional metal components, low resistance test, DC resistance test, resistance test of connecting conductor in ground network ground pole, contact resistance, riveting resistance test, wire length test, etc.		
Working Current	>2A (4A when Battery is fully charged)	<2.1A	
Test Method	Four wires precision method, 2 Road A/D simultaneous detection		
Measurement Range	0.0001Ω~300.0Ω	0.01Ω~100Ω	0.01Ω~100kΩ (A type)
Wire Length Test	L:≤999,999m		
Standard Wire Length	Length setting range: 1m ~ 30m	Length setting range: 1m ~ 100m	
Measurement time	2 seconds /times	3 seconds /times	
Features			
Data Storage	400 groups	1000 groups	
Alarm Setting	1-30ohm		
Data Hold	✓		
Backlight	✓		
Display	LCD Display		
Line Voltage	Should avoid line live measurement		
Overflow Indication	"OL" symbol display		
Low voltage indication	✓		
Working Condition	-10℃~40℃, below 80%rh		
Storage Condition	-10℃~60℃, below 70%rh		
Interface	Rs232 interface.	USB	
Withstanding Voltage	AC 3700V/rms (Between the shell and the screw)		
Safety	IEC61010-1 (CAT III 600V、Pollution 2), JJG724-1991, DL/T967-2005 etc		
General Information			
Power Supply	DC 7.4V 2.6Ah lithium rechargeable battery		
Product Weight	950g	850g	
Product Size	212mm×175mm×76mm	180mm×100mm×40mm	
Standard Accessories	Test wires (Red 5mx 2, Black 5mx2) , RS232 Cable + Software CD x 1, Charger x 1 Manual x 1, Pouch x 1	Test wires (Red 5mx 2, Black 5mx2) , USB Cable + Software CD x 1, Charger x 1 Manual x 1, Pouch x 1	

Refrigerant Gas Leak Detector



■ 827



■ SPECIFICATIONS

Specification	
Indication	LED Indicator & Alarm Beep
Sensitivity	Less than 0.5oz/yr, for all halogen based refrigerants
Warm UP Time	<90s
Response Time	Instantaneous
Features	
Charging Indication	✓
Continuous Working Time	9 hours
Over current Protection	✓
Sensitivity Adjustable	✓
Low Battery Indication	✓
Operation Condition	(0~50)°C ; ≤80%RH (Non Gel)
General Information	
Power Supply	3.7V lithium battery
Goose Neck Probe Length	360mm
Product Size	160mm*66mm*33mm
Product Weight	225g
Standard Accessories	Manual , Battery, Charger + USB cable

Combustible Gas Leak Detectors



■ 826



■ 826A

■ SPECIFICATIONS

Model No.	826	826A
Display	LED Indicator	LCD digital display
Gas Range	—	0-100% LEL
Temperature Measurement	—	(-10~50)°C
Resolution	—	01.% LEL
Accuracy	—	<5% F.S
Warm UP Time	<90s	<90s
Response Time	Instantaneous	Instantaneous
Features		
°C/°F Selectable	—	✓
Backlight Display	—	✓
Charging Indication	—	✓
Alarm Setting	—	✓
Continuous Working Time	4 hours	9 hours
Detect Gas Type	Combustible Gas (Methane, Ethane, Propane, Butane, Gasoline , Town Gas, LPG , Kerosene, Turpenfine)	
Sensitivity Adjustable	✓ minimum 5ppm (gasoline)	
Alarm	LED And Beep	
Low Battery Indication	✓	
Operation Condition	(0~50)°C ; ≤80%RH (Non Gel)	
General Information		
Power Supply	1.5V AA x 3	3.7V lithium battery
Goose Neck Probe Length	360mm	278mm
Product Size	160mm*66mm*33mm	
Product Weight	225g	
Standard Accessories	Manual , Battery, Charger + USB cable (826A only)	

Thermal Imager



350/360

Thermal Imagers



SPECIFICATIONS

Model No.:	350	360
Sensor Type	Uncooled FPA	
Resolution	160×120 Pixels	
Field of View / Min. focus distance	25°×19°/10mm	
Thermal sensitivity	≤0.06°C@30°C	
Frame Rate	50/60Hz	
Focus	Manual	
Spectral Range	8-14um	
Built-in visual camera	1.3M resolution- CMOS module	
Temperatur Range	(-20~ +350)°C, up to 650°C	
Accuracy	±2°C or ±2%	
Emissivity correction	Variable from 0.01 to 1.0	
	1 movable spots. 1 movable area (Max./Min.Ave.Temp.) Alarm (voice, color)	4 movable spots. 3 movable areas(Max./Min.Ave.Temp.) 2 movable lines. Line profile. Isotherms. Temperature difference. Alarm (voice, color)
Features		
LCD screen	3.5inch; TFT color LCD,640×480	
Color Palette	6 colors	11 colors
Language	11 languages	
Image adjustment	Auto/Manual	
Measurement Correction	Auto/Manual	
Setup function	Date / Time, C/F/K temperature unit, language	
Ambient temperature correction	auto	
Atmospheric transmittance correction	Automatic correction according to user input object distance, relative humidity, ambient temperature	
Storage Card	8G,SD card, max 16G	
Storage Method	Manual/Auto single file saving, IR and Visual image link saving	
File format-thermal	JPEG format, with original thermal measurement data included	
File format-visual	JPEG format	
Voice Annotation	Input via built-in microphone up to 60 seconds of digital voice clip per image stored with image	
Laser pointer	Class 2 , 1mW/635nm red	
Auto-sleep and auto-shut down	√	
Water Proof Rating	IP54	
Drop resistance	2 meters	
Video output	PAL/NTSC	
Date output	Mini-USB , The transmission of images, measurements, and speech to a computer	
General Information		
Power Supply	Rechargeable lithium battery(4 hours of continuous work) DC 12V Adapter	
Product Weight	0.98Kg	
Product Size	230mm×105mm×245mm	
Handrail	Both sides can be installed	
Tripod	1/4"-20-UNC	
Standard Accessories	Batteries, Power Charger, SD Card, USB Cable, Video output Cable, Lanyard, Software CD, Card Reader	

Thermal Imager



325



SPECIFICATIONS

Sensor	325
Detector Type	Uncooled FPA
Spectral Range	7.5 ~ 13.5μm
Pixel Spacing	17μm
Sensitivity	<50mK @ f/1.0
Resolution	80 * 60 Pixels
Lens	
Focus	Fixed
FOV	50°
Radiometric	
Temperature Range	(-10 ~ 450) °C
Accuracy	(-10~35) °C ±5°C (35~80) °C ±3°C (80~150) °C ±4°C (150~450) °C ±8°C
D:S	15 : 1
Features	
°C/°F switchable	✓
Emissivity Adjustable	✓
3 Palette Modes	white hot, iron red, rainbow
Memory	500 pictures
Interface	USB Type C
Operating Temperature	(0 ~ 45) °C
General Information	
Power Supply	Rechargeable lithium battery/USB3.0 Type C
Operation time	4hours
Input power	5V DC
Product Size	125 * 72 * 16mm
Product weight	170g
Standard Accessories	USB Type-C cable, DC 5V/2000mA power adapter, Lanyard, Manual



Infrared Thermometer



SPECIFICATIONS

Picture	302B	303B	307C	308D	310C
Model	302B	303B	307C	308D	310C
Temperature	(-32—380) °C (25—716) °F	(-20—550) °C (-4—1022) °F	(-20—800) °C (-4—1472) °F	(-30—1150) °C (-22—2102) °F	(-20—1650) °C (-4—3003) °F
Fieldof view D:R	12:1	12:1	20:1	50:1	50:1
Accuracy	±2.0°C or 2%		±1.5°C or 1.5%		
Resolution	0.1°C/0.1°F				
Measuring time(90%)	0.5s				
RespinseTime	8—14μm				
Emissivity	0.95		0.1-1 adjustable		
Features					
°C/°F	✓	✓	✓	✓	✓
Autopoweroff	✓	✓	✓	✓	✓
DataHold	✓	✓	✓	✓	✓
Backlight	✓	✓	✓	✓	✓
Max/Avg/Min value	—	✓	✓	✓	✓
TemperatureAlarmset	—	✓	✓	✓	✓
Datastorage	—	—	12 group data		
GeneralInformation					
ProductColor	Black+Orange				
PowerSupply	9V battery				
ProductSize	93×37×143mm		147×60×201mm		
ProductWeight	105g(without battery)		270g(without battery)		
Packing	Blisterpacking		Toolkit		
StandardAccessories	Manual/Battery				

6234P/6235P/6236P

**Digital Tachometer**EN61326-1
EN60825-1**SPECIFICATIONS**

Picture				
Model	6234P	6235P	6236P	
Type	LaserType	ContactType	Laser + ContactType	
Range	Laser SurfaceSpeed	2.5~99999RPM (m/min):1.0~1999.9RPM	2.5~99999RPM (m/min):1.0~1999.9RPM	
Contact		1.0~19999RPM	1.0~19999RPM	
Resolution	RPM SurfaceSpeed	0.1RPM (m/min):0.01m/min	0.1RPM (m/min):0.01m/min	
Accuracy	±0.05%+1	±0.05%+1	±0.05%+1	
Time Base	4MHzquartzcrystal	4MHzquartzcrystal	4MHzquartzcrystal	
Features				
Display	5 digits/LCDdisplay	5 digits/LCDdisplay	5 digits/LCDdisplay	
Max.Display	40000	40000	40000	
Lowbatteryindication	√	√	√	
DataStore	√	√	√	
Auto Range	√	√	√	
Auto Poweroff	√	√	√	
Max/MinValue	√	√	√	
GeneralInformation				
PowerSupply	4×1.5VAA	4×1.5VAA	4×1.5VAA	
ProductSize	150×65×30mm	157×65×30mm	157×65×30mm	
ProductWeight	Approx:156g	Approx:200g	Approx:200g	
StandardAccessories	Manual/Battery Reflectivetape	Manual/Battery Reflectivetape contactwheel touch tips	Manual/Battery Reflectivetape contactwheel touch tips	

6237P/6238P

Digital Stroboscope Tachometers**6237P****6238P**

EN61326-1

SPECIFICATIONS

Specification		
Model No.	6237P	6238P
Measuring Range	60 ~ 19999RPM/FPM	60 ~ 39999 RPM/FPM
Coarse/Fine Adjust Knob Range	<1000RPM hours Coarse Adjust :10RPM/FPM Fine Adjust :0.1RPM/FPM	=1000RPM hours Coarse Adjust Knob:100RPM/FPM Fine Adjust Knob:1RPM/FPM
Accuracy	0.05%	
Resolution	<1000RPM:0.1RPM/FPM =1000RPM:1RPM/FPM	
Time Base	10MHz	
Features		
Display	5 Digits LCD	
Max. Display	19999	
Data Recording	√	
Backlight	√	
General Information		
Power Supply	4×1.5V AA	
Product Size	195×73×38mm	
Product Weight	Approx. 200g	

Sound Level Meter



■ 824C



■ 824

CE EN 61326-2-8

■ SPECIFICATIONS

Model	824C	824
Range	30~130dBA	30~130dBA;35~130dBC
Resolution	0.1dB	
Accuracy	±1.5dB(94dB@1KHz)	
Sampling Rate	2times/s	
Frequency Response	31.5Hz~8.5KHz	
Frequency weighting characteristic	A	A&C
Time Weighing	---	Fast/Slow
Microphone	1/2inch polarization capacitance microphone	
Working environment	0~40°C,10~80%RH	
Storing environment	-10~60°C 10~70%RH	
Features		
Max value	---	✓
Backlight	---	✓
AC/DC Output	---	✓
General Information		
Product Color	Black+ Orange	
Power Supply	9V 1pcs or DC 6V 100mA adapter	
Product Size	130×57×30mm	
Product Weight	173g	
Packing	Blister packing	
Standard Accessories	Manual/ Battery	

Digital K Type Thermometer
Industrial Hygro-thermometer

CE EN61326-1

■ SPECIFICATIONS

Specifications	Range	6801	Accuracy	Resolution
Temperature measurement(K)	-150 °C ~ 1000 °C 1000 °C ~ 1300 °C	±(0.2%+1.5 °C) ±(0.5%+2 °C)	0.1 °C 1 °C	
Features				
Low voltage display	✓			
Data hold	✓			
Unit conversion (°C/F)	✓			
Max/Min/Avg	✓			
Working temperature	0°C ~ 40°C			
Working humidity (relative)	80%RH			
General characteristics				
Power	2×1.5 AA Zinc-manganese batteries			
Product color	Black			
Product net weight	0.06kg			
Product size	149×71×35mm			
Standard accessories	Thermocouple probe (TP01), battery			
Standard individual packing	colorbox, manual			



■ 6801



■ 231

CE EN61326-1

■ SPECIFICATIONS

Specifications	Range	231	Accuracy	Resolution
Temperature measurement(K)	(-25~75) °C 0~99.9%	±0.3°C ±2%	0.1 °C 0.1%	
Working temperature	No Condensation			
Working humidity (relative)	0~60°C , 0~90%			
General characteristics				
Power	2×1.5AAA batteries			
Product color	Black+ Orange			
Product net weight	100g			
Product size	175×65×28mm			
Standard accessories	battery, Manual			

Moisture Meter

■ 2GA



■ 2GB

Specification 2GA	
Test Materials	Wood and Building Materials
Moisture Content Range	Material 1 8.8~54.8% Beech, Spruce, Larch, Birch, Cherry, Walnut
	Material 2 7.0~47.9% Oak, Pine, Maple, Ash Tree, Douglas Fir, Meranti
	Material 3 0.9~22.1% Cement, Concrete Plane, Plaster Produce
	Material 4 0.0~11.0% Anhydrite Plane
	Material 5 0.7~8.6% Cement Mortar
	Material 6 0.6~8.6% Lime Mortar, gypsum
	Material 7 0.1~16.5% Brick
Resolution	0.1%, 1°C
Accuracy	±1%, ±1.5°C
Sampling Time	0.5s
Features	
GN/YL/RD LED Indication	✓
Protection Class	IP 20
Testing Depth	11mm
Auto Zero	✓
°C/°F	✓
Operation Temperature	(-10~+50)°C
Storage Temperature	(-40~+70)°C
General Information	
Power Supply	9V 6F22
Product Size	130×50×20mm
Product Weight	100g
Standard Accessories	Battery / Instruction Manual
Specification 2GB	
Parameters	Temperature & Moisture Content
Moisture Content Range	5%~40%
Resolution	0.1%, 1°C
Accuracy	±1%, ±2°C
Sampling Time	0.5s
Features	
Protection Class	IP 20
4 kinds of Paper testing modes	✓
°C/°F	✓
Operation Temperature	(-10~+50)°C
Storage Temperature	(-40~+70)°C
General Information	
Power Supply	9V 6F22
Product Size	130×50×20mm
Product Weight	100g
Standard Accessories	Battery / Instruction Manual

Anemometers

■ 816



■ 816B

SPECIFICATIONS

Air Speed Range 816				
Unit	Range	Resolution	Threshold	Accuracy
M/s	0~30	0.1	0.1	
Ft/min	0~5860	19	39	
Knots	0~55	0.2	0.1	±5%
Km/hr	0~90	0.3	0.3	
Mph	0~65	0.2	0.2	
Temperature Range				
Unit	Range	Resolution	Accuracy	
°C	(-10~45)°C	0.2	±2°C	
°F	(14~113)°F	0.2	±2°C	
Features				
Temperature Probe	NTC			
Backlight	✓			
Max / Average Value	✓			
°C/°F Switchable	✓			
Beaufort scale Level display	✓			
Wind Chill indication	✓			
Low battery indication	✓			
General Information				
Power Supply	Cr2032 3.0V			
Product Weight	52g			
Product Size	104.3mmx57.8mmx19.9mm			
Standard Accessories	Manual / Battery / Lanyard			

SPECIFICATIONS

Air Velocity Range 816B			
Unit	Range	Resolution	Accuracy
M/s	0~45	0.1	
Ft/min	0~8800	19	
Knots	0~88	0.2	
Km/hr	0~140	0.3	
Mph	0~100	0.2	
Temperature Range			
Unit	Range	Resolution	Resolution
°C	0°C~45°C	0.2	±2°C
°F	32°F~113°F	0.36	±3.6°F
Features			
Wind Chill Indication	✓		
Beaufort Wind Scale Display	✓		
°C/°F Switchable	✓		
Max./Min./Ave. Value	✓		
USB connection for the vane and the display	✓		
Thermometer Sensor	NTC Temperature sensor		
Operation Condition	-10°C~50°C(14°F~122°F) / ≤90%RH		
General Information			
Power Supply	1*9V Battery		
Product Size	Main Unit:147mmx72mmx35mm/Vane:172mmx65mmx29mm		
Product Weight	270g		

Portable Endoscopes



SPECIFICATIONS

Specifications

Model	501	502	503	504	505
LCD	2.4" TFT	3.5" TFT	3.5" TFT	2.4" TFT	—
Saturation	Adjustable (6 levels)	—	—	—	24-dots, RGB
Rotation	180°	180°	180°	180°	60°
Resolution	0.3-megapixel	0.3-megapixel	0.3-megapixel	0.3-megapixel	0.3-megapixel
Camera Diameter	5.5mm	8.5mm	8.5mm	8.5mm	5.5mm
Shaft Diameter	4.8mm	6.8mm	6.8mm	6.8mm	4.8mm
Shaft Length	100cm	100cm	100cm	100cm	80cm
Camera specifications	1/9 VGA CMOS	1/9 VGA CMOS	1/9 VGA CMOS	1/12 VGA CMOS	1/12 VGA CMOS
Light Source	6 white Highlight LED, Adjustable (5 levels)	6 white Highlight LED, Adjustable (5 levels)	6 white Highlight LED, Adjustable (5 levels)	6 white Highlight LED, Adjustable (5 levels)	6 white Highlight LED, Adjustable (5 levels)
The max number of frames (FPS)	—	—	30FPS/S	—	—
Features					
Photo Taking	-	√	-	√	√
Video Recording	-	√	-	√	√
Audio Recording	-	√	-	√	-
Memory	-	√	-	√	√
Zoom	-	5.0X	-	3.0X	-
USB Interface	-	√	-	√	√
USB Cable Length	-	1.25M	-	1.25M	2M
AV output interfaces	-	√	-	√	√
DC Power Supply	-	√	-	√	-
Water Proof Level	IP67	—	—	—	—
Focal Distance	3cm~8cm				
General Information					
Power Supply	4 x 1.5 (AA) Battery			—	
Product Weight	500g			250g	
Product Size	81×75×62mm			70x30mm	
Standard Accessories	Tool Case, Manual, Hock, magnet, Lanyard, Probe	Tool Case, Manual, USB Cable, Hock, magnet, Video-out Cable, Probe, DC Output Cable	Tool Case, Manual, USB Cable, Hock, magnet, Lanyard, Video-out Cable, Probe	Tool Case, Manual, Software CD	Manual, Software CD

Coating Thickness Gauges



SPECIFICATIONS

Specification

Model	852A	852E
Sensor type	Built-in F/NF 2 in 1 Type	Separate F/NF 2 in 1 Type
Range	0~50mil; 0~1250μm	0~50mil; 0~1250μm
Resolution	1um, 0.1mils	0.1μm/mil
Accuracy	± (3%H+2μm)	± (2%H+2μm)
Response Time	0.5s	0.5s
Features		
LCD screen	TFT 160*128	TFT 320*240
Flip Display	√	—
Um/Micron display	√	√
zero adjustment	5 point	5 point
Auto Detect Substrate Material	√	√
Data Store	99 groups	50 groups
Single/Continuous Measurement	√	√
Alarm	—	√
Max/Min/Ave/Deviation	√	√
Auto power on & off	√	√
Backlight	√	Adjustable backlight
Low Battery Indication	√	√
Language	English	English / Chinese(Customizable)
General Information		
Power Supply	2*1.5V, AAA Battery	4*1.5V, AAA Battery
Product Size	100*52*29mm	166*68*30mm
Product weight	68g	180g
Standard Accessories	Calibration Foils/Substrate Blocks/ Manual/Tool Case	Calibration Foils/Substrate Blocks/ Manual Tool Case/F/NF sensor
Packing	30pcs/CTN; G.W.:15.0KG	30pcs/CTN; G.W.:18.0KG

Vibration Testers



SPECIFICATIONS



Model No.	63	63A	63B
Probe Type	Built-in Probe	Separate Probe	Separate Probe
Measuring Range			
Vibration Displacement(P-P)	0~1999μm	0~1000μm	0~1999μm
Vibration Speed(RMS)	0~199.9mm/s	0~71mm/s	0~199.9mm/s
Vibration Acceleration(O-P)	0~199.9mm/s ²	—	0~199.9mm/s ²
The error between frequency range and breadth value			
Vibration Displacement(P-P)	10~200Hz, ≤±10%	12~200Hz, ≤±10%	10~200Hz, ≤±10%
Vibration Speed(RMS)	10~500Hz, ≤±10%	12~500Hz, ≤±10%	10~500Hz, ≤±10%
Vibration Acceleration(O-P)	10~1000Hz, ≤±10%	—	10~1000Hz, ≤±10%
Breadth Value Linearity Error			
Vibration Displacement(P-P)	0~20μm, ≤±10% / ≥20μm, ≤±5%		
Vibration Speed(RMS)	0~2.0μm/s, ≤±10% / >20μm/s, ≤±5%		
Vibration Acceleration(O-P)	0~2.0m/s, ≤±10% >2.0m/s, ≤±5%	—	0~2.0m/s, ≤±10% >2.0m/s, ≤±5%
Features			
Low Battery Indication	√		
Data Hold	√		
Value Wave Display	√		
Operation Condition	0~40°C/≤80%		
General Information			
Power Supply	1*9V 6F22		
Product Weight	185×68×30mm		
Product Size	230g		

Dynamic Balancing Vibration Analyzer



SPECIFICATIONS

Specifications	Electric eddy current ; Electromagnetic velocity transducer ICP Electromagnetic velocity transducer Acceleration transducer D1 Key phase signal + photoelectric sensor/ eddy current sensor
Input Signal	Rotation Speed Vibration Displacement(P-P) Vibration Speed(RMS) Vibration Acceleration(O-P)
Rotation Speed	30~10,000 RPM (Accuracy :<±1)
Vibration Displacement(P-P)	0~1000μm
Vibration Speed(RMS)	0.1~199.9mm/s
Vibration Acceleration(O-P)	0.1~99.9m/s ²
Phase	0~360°
Frequency Response	5Hz~10KHz
Features	
Display	3.5 inch color LCD , 320*240, 64k
Interface	mini USB
Data Storage	8GB
Diagram	Spectrogram/Time domain waveform diagram/Overall value Channels 2
Channels	2
Backlight brightness adjustment	√
Dynamic Balance	On site 1 or 2 plane dynamic balance by Influence coefficient method
Low Battery Indication	√
Operation Condition	0~40°C/≤80%
General Information	
Power Supply	Rechargeable Lithium battery / DC 5V 1000mA
Product Size	185×68×30mm
Product weight	700g
Standard Accessories	Manual , USB Cable + Charger , RPM measure Cable, Vibration x1, measure cable x2, RPM sensor x1 , Vibration sensor x2

Hardness Testers

■ LX-A-1



■ LX-A-2



■ LX-A-Y

Inclinometers

■ 5001



■ 5003



■ 5005



■ 5006

SPECIFICATIONS

EN61326-1

Model No.	LX-A-1	LX-A-2	LX-A-Y
Application			
Range	Type A Durometer for Soft rubber, plastics and elastomers.		
Recommend Measure Range	0-100HA		
Resolution	—	0.1	
Accuracy	10-90HA:<±1		
Display	Analog	Digital	
Needle Diameter	0.79mm		
Depth of Indentation	2.5mm		
Force of Pressure	0.55-8.05N		
Features			
Data Hold	—	✓	
Zero Function	—	✓	
Pointer	1	2 (With memory pointer)	—
Standard	GB/T531-99,GB2411-80,HG/T2489-93,JJG304-2003		
General Information			
Power Supply	128mmx57mmx30mm		CRV 03 x1
Product Size	200g		
Product weight	Manaul , Tool Case		

SPECIFICATIONS

EN61326-1

Model	5001	5003	5005	5006
Range	4x90°			
Resolution	0.05°			
Accuracy	±0.2°	0&90°(<0.1°) other wise :<0.15°		
Repeatability	0.1°			
Features				
Magnet	1 side	3 side	N/A	1 side
Backlight	—	—	✓	✓
Data Hold	✓		—	
Angle / Slope selective	✓		—	
Zero Funciton	✓		—	
Auto Power Off	✓			
Beep on & off	—		✓	
Absolute/ Relative measurement switch	✓			
%mm/m ,in/ft Switch	—		✓	
Backlight				
Power Supply	1.5V AAA x 2			
Product Size	57mmx57mmx30.5mm		189mmx64mmx33mm	
Product Weight	200g			400g

Force Gauges



■ 10N

■ 100N

■ 500N



SPECIFICATIONS

Model	10N	50N	100N	200N	300N	500N
Max. Load value	1KG 2.2Lb	5KG 11Lb	20KG 22Lb	20KG 45Lb	30KG 65Lb	50KG 110Lb
Resolution	0.01N 0.001KG 0.001Lb	0.1N 0.01KG 0.01Lb				
Accuracy	±0.5%					
Features						
Units Selectable	N/Kg/Lb					
Gravity Acceleration Setting	✓ (default value 9.800)					
Backlight	✓					
Zero Function	✓					
Peak Hold	✓					
Alarm for Upper &lower value	✓					
Low battery indication	✓					
Auto off	10 minutes idle					
Working Condition	No focus ,Non-corrosive in surroundings					
General Information						
Power Supply	3.7V Rechargeable lithium battery Charging time : 4-6hours Battery life: ≥ 300 times Input:AC100- 240V 50-60Hz Output: DC 5V 1000mA					
Product Size	140mmx71mmx35mm					
Product Weight	300g					
Standard Accessories	Chargerx1 , Clampx4, Extension Tube x 1,Mounting Screw x4,Manualx1					

Handheld Metal Detectors

Product features

- Digital microprocessor technology eliminates the need for sensitivity adjustments.
- Rugged, high-impact ABS case with reinforced coil compartment.
- Detection of metal causes clear alarm noise and bright LED illumination.
- The detection distance will not change when the battery voltage drops from 9V to 7V.
- Includes external rechargeable jack (Charger not included).
- Includes audio, light and vibration hands-off switch.



■ 931/932

SPECIFICATIONS

Model No.	931	932
Indication Type	Audio + Light Vibration + Light	Audio + Light
Detection Distance	Coin :6-250px Knife :5-250px 64 mode handgun:15-500px Steel Ball (Dia:20mm):8-250px	
Battery voltage drops from 9v to 7V , Detection distance will not be influenced	✓	
Low Battery Indication	✓	
Low power consumption	Work 40 hours continuously	
Sensitivity Adjustable	✓	
Operation Temperature	(-5~55) °C	
General Information		
Power Supply	9V 6F22ND/ DC 10V	
Product Size	418mmx87mmx41mm	
Product Weight	380g	
Standard Accessories	Battery , Manual,Leather Pouch	

Wall Scanners**Application**

- 518 is a handheld wall scanner for quick detection of magnetic metals in wall, rooftop and floor, such as reinforcing steels, iron pipes, and nonmagnetic metals such as aluminum pipes, copper pipes, and nonmetal materials such as beams, PVC water pipes, as well as electrified objects as live wires.

Advantages

- Perfect for detecting metal, wood and AC cable hidden in the wall.
- Indicates the detecting results by Light and Beep.
- Detect AC cable with voltage higher than 110V, 50-60Hz,
- the sensibility may be weak when the cable is grounded.
- High accuracy, with a maximum detection depth of 110mm.



■ 518



EN61326-1

SPECIFICATIONS

Detection Material	Ferrous Metals	Non-ferrous metals (copper pipe)	Copper conductors (Live)	Wood
Maximum Scanning Depth	110mm	110mm	50mm	25mm
Features				
Indication	Light and Beep			
Maximum Scanning Depth	110mm			
Auto Power Off	√			
Operation Condition	√			
General Information				
Power Supply	3*1.5V AAA Batteries			
Product Size	185×85×33mm			
Product Weight	180g			
Standard Accessories	Manual/Battery			

Water Leakage Detectors

■ 528



■ 538

SPECIFICATIONS

Model No.	528	538
Frequency Analysis Bandwidth	70~3000Hz, 2 bandwidths	70~4000Hz, 2 bandwidths
Frequency Division (Center Frequency)	a:100Hz b:200Hz c:400Hz d:800Hz e:1KHz f:1.5KHz g:2KHz	a:100Hz b:200Hz c:400Hz d:800Hz e:1KHz f:1.5KHz g:3KHz
Features		
Measuring Mode	All Pass :for quiet environment Band Pass :for noisy environment	
Bandwidth	Narrow Band: symbol III Middle Width Band : symbol II III	
Value Display	Display as a bar (within 0-100)	
Display	160×160 pixel, LCD with backlight	
Data Store	Store 9 groups value in 9 separate channels	
Operation temperature	(-10~+50) °C	
Storage temperature	(-10~+70) °C	
General Information		
Power Supply	Rechargeable Lithium Battery, 7.4V 3000mAh Working time after fully Charged ≥35hours	
Product Size	210×98×98mm	
Product Weight	Main Unit (include battery): 0.77 kg Cable-controlled components: 0.24 kg Vibration pickup: 0.28 kg Headset: 0.35 kg Probe components: 0.38 kg Aluminum case (include Main Unit and accessories): 5.5 k	
	Main Unit x 1 Remote control components x 1 Probe x 1 Probe Pin x 1 Probe Post Holder x 1 Vibration Absorber Assembly x 1 Headset x 1 Shoulder strap x 1 Charger x 1 Instruction Manual x 1 Aluminum Tool Case x 1	
Standard Accessories		

Brake Fluide Testers



■ 2GE



■ 2GF

Battery Testers



■ 3015A



■ 3015B



CE EN61326-1

■ SPECIFICATIONS

Model No.	3015A	3015B	3015C(3 in 1 Type)
Battery Type	6V / 12V (lead-acid storage battery)	Power Battery 6V/12V	Starter Battery 12V
Load Test Current	About 20 A	About 80 A	
Max. Voltage	DC 19.99V		
CCA(Cold Cranking Amps)	100~1700		
IEC	100~1000		
EN	100~1700		
DIN	100~1000		
Working Voltage	9V ~ 18V	9V ~ 35V	9V ~ 18V
Internal Resistance	1.00~99.99mΩ		
Battery Capacitance	5AH-80AH		40AH-200AH
Storage Battery Test	✓		
Engine System Activation			
Load Test	—	✓	
Maximum Load System Test	—		✓
Charging System Test	✓		
Features			
LED Indication for Battery Condition & Charging System	✓	—	
LCD Digital Display	—	✓	
Oversupply Protection	✓		
Polarity Reverse Protection	✓		
General Information			
Product Size	115mm*70mm*205mm		
Product Weight	860g	900g	
Standard Accessories	Manual		

■ SPECIFICATIONS

Model No.:	2GE	2GF
Test Brake Fluid Type	DOT3, DOT4, DOT5.1	
Test Moisture Range	0.1%/1.0%/1.5%/2.5%/3.0%/4.0%	
LED indication	✓	—
LCD with Backlight Display	—	✓
Battery Power Check	—	✓
Mute Mode	—	✓
General Information		
Power Supply	9V 6F22 Battery	
Product Size	191×75×30mm	
Product Weight	Approx.300g	
Standard Accessories	Battery, Instruction Manual.	
Standard inner packing	Color box	

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Battery Testers

■ 3012



■ 3013

SPECIFICATIONS

Model No.	3012	3013
CCA(Cold Cranking Amps)	100~1700	
IEC	100~1000	
EN	100~1700	
DIN	100~1000	
Working Voltage	9V~18V	
Internal Resistance	0.00~99.99mΩ	
Storage Battery Test	✓	
Engine System Activation Load Test	✓	
Charging System Test	✓	
Features		
Model No.	3012	3013
Indication	—	✓ 3 Colors LED Lights
Test Lead Length	850mm	
Oversupply Protection	✓	
Polarity Reverse Protection	✓	
General Information		
Product Size	140mm*80mm*30mm	
Product Weight	300g	
Standard Accessories	Manual	



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Battery Testers

■ 3015/3025



■ 3026



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SPECIFICATIONS

Model No.	3015	3025	3026
CCA(Cold Cranking Amps)	12V Storage Battery	12V/24V Storage Battery	12V Storage Battery
IEC	100~1700		
EN	100~1000		
CCA(Cold Cranking Amps)	100~1700		
IEC	100~1000		
EN	9V ~ 18V	9V ~ 35V	9V ~ 18V
DIN	0.00~99.99mΩ		
Working Voltage	30AH-200AH		
Internal Resistance	✓		
Storage Battery Test	✓		
Engine System Activation Load Test	✓		
Charging System Test	✓		
Features			
Model No.	3015	3025	3026
Indication	—	—	✓
Test Lead Length	700mm		
Oversupply Protection	✓		
Polarity Reverse Protection	✓		
General Information			
Product Size	180mm*90mm*32mm		230mm*90mm*32mm
Product Weight	400g		500g
Standard Accessories	Manual		Manual, tool case

Accessories For Meters

L01
■ Insulated test lead
■ Cable length 800mm, probe and body length 115mm;
■ CAT I 1000V / CAT II 600V 10A



L02
■ Double insulation test lead with removable cap length 115mm;
■ Cable length 900mm, probe and body len
■ CAT III 1000V / CAT IV 600V 10A



L03
■ UL 16AWG double insulation test lead with removable cap
■ Cable length 900mm, probe and body length 130mm
■ CAT III 1000V / CATIV 600V 20A



L04
■ UL 18AWG double insulation test lead with
■ Removable cap with screw tip to connect with alligator clips
■ Cable length 900mm, probe and body length 130mm
■ CAT III 1000V / CAT IV 600V 10A



L05
■ UL 18AWG double insulation test lead with removable cap
■ Cable length 900mm, probe and body length 130mm
■ CAT III 1000V / CATIV 600V 10A



L06
■ Material: 16AWG UL authenticated material
■ Length:110mm
■ Safety level: CAT III 1000V/CAT IV 600V
■ Applications: For any electrical testers



L07
■ Insulated alligator clips with banana jack
■ Length 80mm, clip opening 36mm
■ CAT III 1000V / CAT IV 600V



L08
■ Insulated alligator clips with banana jack
■ Length 75mm, clip opening 27mm
■ CAT III 1000V / CAT IV 600V



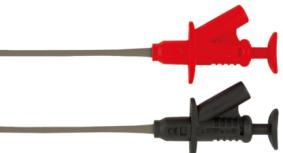
L09
■ Specifications: Length 53mm,opening 6mm



C01
■ Multi-purpose socket
■ Transistor and k-type inputs to banana output



C02
■ Multi-purpose socket
■ Transistor and k-type inputs to banana output



L10
■ Extendable Probe makes measurement more convenient;
■ Standard banana interface could connect to multiple types
of test lead adapters;
■ CAT III 1000V, CAT IV 600 V 5A

Accessories For Meters

L11
■ Combination: combined with 1PCS green, 1PCS black
■ anti-1PCS red alligator clip test leads
■ Material: Double insulated UL authenticated material
■ Total length:1500 ±20mm
■ Safety level: CAT III 1000V



L12
■ Length: 450mm, Probe Length:5mm
■ Safety Level: CAT III 1000V
■ Application: SMT components measurement,
universal test leads



L13
■ Core:19/20
■ Length:110-130mm
■ Features and application: full protection cross input terminal



H01
■ Length: 1000mm, Clip opening:3mm
■ Safety level: CAT II 600V 2A
■ Application: BNC connector for instrument inputs



H02
■ Passive Probe (1:10:1)
■ Bandwidth 200MHz
■ Input Resistance 1×:1MΩ±2%, 10×:10MΩ±2%
■ Input Capacitance 1×:85pF~115pF, 10×:18.5pF~22.5pF
■ Compensation Range 15pF~30pF
■ Operating Voltage 1×:300Vp-p, 10×:600Vp-p



H03
■ Passive Probe (100:1)
■ Bandwidth 100MHz
■ Input Resistance 100MΩ±2%
■ Input Capacitance 4pF~6pF
■ Compensation Range 10pF~35pF
■ Operating Voltage 2000V DC+ACpk



L57A
■ Alligator-Clip Test Cable
■ Length of Test Cable: 5 meters
■ Safety Category: CAT III 600V 10A



L58A
■ Alligator-Clip Test Cable
■ Length of Test Cable: 10 meters
■ Safety Category: CAT III 600V 10A



L59A
■ Alligator-Clip Test Cable
■ Length of Test Cable: 20 meters
■ Safety Category: CAT III 600V 10A



T01
■ Flat Plug Input, applicable to regular temperature measurement
■ Teflon coating insulation;
■ Not applicable for liquid measurement;
■ Accuracy: ±0.75%
■ Range: -40°C~260°C(-40°F~500°F)



T10K
■ For food temperature measurement;
■ Also for liquid and gel temperature measurement;
■ Entire probe covered with metal coating protection;
■ Probe length: 180mm, Lead wire length: 1000mm;
■ Range: -50°C~600°C (-50°F ~ 1112°F)



T04
■ For food temperature measurement;
■ Also for liquid and gel temperature measurement;
■ Entire probe covered with metal coating protection;
■ Probe length: 180mm, Lead wire length: 1000mm;
■ Range: -50°C~600°C (-50°F ~ 1112°F)

