

MCH

深圳市美创仪器仪表有限公司
MCH Instruments CO., Ltd.

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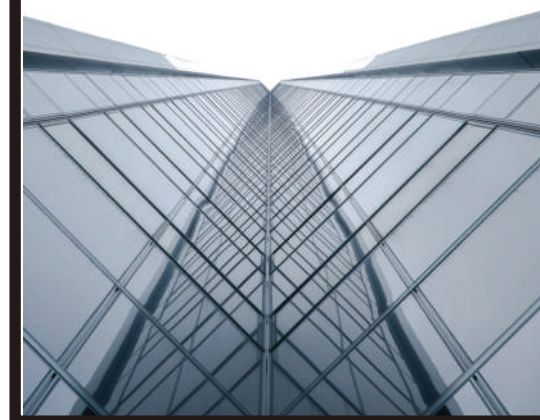


Product Catalogue

产品目录

专业铸就品质 信誉成就未来

Professional achieve Quality
Credibility achieve Future



MCH is a leading high-tech enterprise engaged in research, development, production and sales of measuring instruments.
It is a member of China Electronic Instrument Industry Association and China Instrument Association.



公司简介

COMPANY PROFILE

本公司专业生产示波器、频谱分析仪、函数信号发生器、频率计、毫伏表、直流稳压电源等上百款测量仪器。

本公司成立于1995年,发展至今,已经拥有强大的生产及研发能力。质量第一,服务至上,性价比是我们一贯的追求。愿能成为您长期的合作伙伴。

MCH specializes in manufacturing up to hundred models of measuring instruments, such as Oscilloscope, Spectrum Analyzer, Function Generator, Frequency Counter, Millivoltmeter, DC Power Supply and so on.

The Company was founded in 1995. After many years of development, it has become strong not only in size, but also in production and R & D capability. Quality first, service utmost and economic pricing is our consistent commitment. We look forward to being your long-term partner.

目录

PRODUCT CONTENT

数字储存示波器	Digital Storage Oscilloscope	01-02
模拟示波器	Analogue Oscilloscope	03-08
频谱分析仪	Spectrum Analyzer	09-09
信号发生器	Signal Generator	10-17
毫伏表	Millivoltmeter	18-19
数字电桥	Digital LCR Meter	20-20
电子负载	Electronic Load	21-22
电源系列	Power series	23-36
低欧姆表	DC Low-Ohm Meter	37-37
频率计	Frequency Counter	37-38
自动失真仪	Automatic Disortion Meter	39-40
频率特性扫频仪	Sweep Signal Analyzer	41-41
耐压测试仪	Voltage Withstand Tester	42-42
数字集成电路测试仪	Digital IC Tester	43-43
计数秤	Perce Computing Scale	44-44
拆焊工具	Soldering Tools	45-50
万用表系列	Multimeter series	51-78

DS-2100CA

DIGITAL STORAGE OSCILLOSCOPE

数字存储示波器

特点

- 1GS/s实时采样率
- 2个模拟通道
- 25kpts存储深度
- 触发类型标配: 边沿, 脉宽, 视频, 交替
- 7英寸WVGA, 800x480, TFT液晶屏
- 支持USB OTG, PASS/FAIL
- 支持同时打开Y-T和X-Y模式, 可观测李沙育波形
- 输入AC电压220V(110V可选)



FEATURES

- 1GS/s Real-time Sampling Rate
- 25 KPTS storage depth
- Trigger Type Matching: Edge, Pulse Width, Video, Alternation
- Supporting opening Y-T and X-Y modes at the same time, observable Lishayu waveform
- 7-inch WVGA (800 x 480) TFT LCD screen
- 2 analog channels
- Supporting USB OTG, PASS/FAIL
- Power supply: AC 220V (110V optional)

SPECIFICATIONS	MODEL	DS-2100CA
Channels (通道)		2 + Ext. Trigger
Bandwidth (带宽)		100MHz
Rise Time (上升时间)		7ns
Time Base (时基)		5ns - 50s/div
Real Time Sample Rate (实时采样率)		1GSa/s
Equivalent Sample Rate (等效采样率)		50GSa/s
Input Impedance (输入阻抗)		1MΩ/13pF
Input Coupling (输入耦合)		DC, AC, GND
Trigger (触发模式)		Edge, Pulse Width, Video, Alternation (边沿, 脉宽, 视频, 交替)
Acquisition Modes (获取模式)		Auto, Normal, Single
Trigger Sources (触发源)		Ch1, CH2, Ext, Ext/5, Ext(50Ω)
Horizontal Accuracy (水平精度)		±0.01%
Vertical Sensitivity (垂直灵敏度)		1 mV/div - 20V/div
Vertical Resolution (垂直分辨率)		8bit
Max. Input Voltage (最大输入电压)		400V(DC+AC peak), 5Vrms@50Ω
Auto Measurements (自动测量)		Vpp, Vamp, Vrms, Vmax, Vmin, Vtop, Vbase, Vavg, Freq, Period, Rise time Fall time, +Width, -Width, Overshoot, Preshoot, +Duty, -Duty, etc
Math (数学运算)		+, -, x, *, FFT
Storage Depth (存储深度)		25 kpts
Storage Method (储存方式)		Settings, Waveforms, bitmaps (设置, 波形, 位图)
FFT	Window (窗口)	Hanning, Hamming, Blackman-Harris, Rectangular
	Sample Points (采样点)	1024 points
X-Y	Bandwidth (带宽)	100MHz
	Phase Diff. (相差)	±3 degrees
Display (显示屏)		A/CA: Mono/Color, 800x480 resolution
Power supply (输入电源)		Worldwide 100-225V/40VA Max.optional
Interface (接口)		USB Port
Accessories (配件)		Probe x2, Power Cord, User's Manual
Dimension (尺寸)		306(W) x 134(H) x 122(D) mm
Weight (重量)		2.2 Kg

1GS/s Real-time Sampling Rate
25/40/60/100/150/200 MHz



DS-2000CA

DIGITAL STORAGE OSCILLOSCOPE

数字存储示波器

特点

- 1GS/s实时采样率
- 2个模拟通道
- 单声道/彩色320 X 240 分辨率
- 支持同时打开Y-T和X-Y模式, 可观测李沙育波形
- 触发类型标配: 边沿, 脉宽, 视频, 交替
- 输入AC电压220V(110V可选)

FEATURES

- 1GS/s Real-time Sampling Rate
- Trigger Type Matching: Edge, Pulse Width, Video, Alternation
- Supporting opening Y-T and X-Y modes at the same time
- Mono/Color 320 X 240 resolution
- 2 analog channels
- Power supply: AC 220V (110V optional)

SPECIFICATIONS	MODEL	DS-2025CA	DS-2040CA	DS-2060CA	DS-2100CA	DS-2200CA	DS-2300CA
Channels (通道)		2 + Ext. Trigger	2 + Ext. Trigger	2 + Ext. Trigger	2 + Ext. Trigger	2 + Ext. Trigger	2 + Ext. Trigger
Bandwidth (带宽)		25MHz	40MHz	60MHz	100MHz	200MHz	300MHz
Rise Time (上升时间)		13.8ns	8.7ns	5.8ns	3.5ns	2.3ns	1.8ns
Time Base (时基)		5ns - 50s/div	5ns - 50s/div	5ns - 50s/div	2ns - 50s/div	1ns - 50s/div	1ns - 50s/div
Real Time Sample Rate (实时采样率)		1GSa/s					
Equivalent Sample Rate (等效采样率)		50GSa/s					
Input Impedance (输入阻抗)		1MΩ/13pF					
Input Coupling (输入耦合)		DC, AC, GND					
Trigger (触发模式)		Edge, Pulse Width, Video, Alternation (边沿, 脉宽, 视频, 交替)					
Acquisition Modes (获取模式)		Auto, Normal, Single					
Trigger Sources (触发源)		Ch1, CH2, Ext, Ext/5, Ext(50Ω)					
Horizontal Accuracy (水平精度)		±0.01%					
Vertical Sensitivity (垂直灵敏度)		2 mV/div - 5V/div					
Vertical Resolution (垂直分辨率)		8bit					
Max. Input Voltage (最大输入电压)		400V(DC+AC peak), 5Vrms@50Ω					
Auto Measurements (自动测量)		Vpp, Vamp, Vrms, Vmax, Vmin, Vtop, Vbase, Vavg, Freq, Period, Rise time Fall time, +Width, -Width, Overshoot, Preshoot, +Duty, -Duty, etc					
Math (数学运算)		+, -, x, *, FFT					
Storage Depth (存储深度)		10 kpts					
Storage Method (储存方式)		Hanning, Hamming, Blackman-Harris, Rectangular					
FFT	Window (窗口)						
	Sample Points (采样点)	1024 points					
X-Y	Bandwidth (带宽)	25MHz	40MHz	60MHz	100MHz	200MHz	200MHz
	Phase Diff. (相差)	±3 degrees					
Display (显示屏)		A/CA: Mono/Color, 320x240 resolution					
Power supply (输入电源)		Worldwide 100-225V/40VA Max.optional					
Interface (接口)		USB Port					
Accessories (配件)		Probe x2, Power Cord, User's Manual					
Dimension (尺寸)		306(W) x 134(H) x 122(D) mm					
Weight (重量)		2.2 Kg					

V-212/V-5030

OSCILLOSCOPE

模拟示波器

特点

- DC-20MHz / DC-30MHz
- 双通/双踪, X-Y方式
- 6英寸大屏幕, 进口高亮度示波管
- 高灵敏度触发, 达到1mV/格
- 电视同步分离电路可以观察到稳定的TV信号
- 触发方式: 自动、常态、电视场、电视行
- 垂直方式: CH1, CH2, 交替, 断续, 相加
- X-x10, Y-x5
- 相位正负反转
- CH1同步输出
- 输入AC电压220V(110V可选)

6" DISPLAY
20MHz / 30MHz

FEATURES

- DC-20MHz / DC-30MHz
- 6" display, imported high brightness oscilloscope tube
- High sensitivity of triggering, up to 1mV/division
- TV synchronous separation circuit to observe stable TV signal
- Trigger mode: AUTO/NORM/TV-V/TV-H
- X-x10/Y-x5
- CH1 Sync output
- Dual channels/dual traces, X-Y mode
- Vertical: CH1/CH2/ALT/CHOP/ADD
- Polarity inversion
- Power supply: AC 220V (110V optional)

SPECIFICATIONS	MODEL	V-212	V-5030
CRT		6" rectangular screen with internal graticule, 8x10div (6英寸带内部格画线的屏幕 8x10格, 1格=1cm)	
Bandwidth (带宽)		20MHz	30MHz
Vertical deflection (垂直偏向)			
Display model (显示模式)		CH1, CH2, ADD, ALT, CHOP (CH1, CH2, 相加, 交替, 断续)	
Deflection factor (偏转因子)		5mV/div to 5V/div $\pm 3\%$, 1mV/div to 1V/div $\pm 5\%$ (x5), 10 steps (5mV/格到5V/格, 5倍时: 1mV/格到1V/格, 10个档)	
Rise time (上升时间)		≤ 17.2 ns	
Max. input voltage (最大输入电压)		250V(DC+AC peak) ≤ 1 KHz	
Input Coupling (输入耦合)		AC, DC, GND	
Polarity selection (极性选择)		+ or - (CH2 Only) (仅CH2)	
Horizontal deflection (水平偏向)			
Display mode (显示模式)		1, 10, X-Y	
Time base (时基)		0.2 μ s/div to 0.2s/div, 9 ranges (0.2 μ s/格到0.2s/格, 9个档)	
Sweep magnification (扫描展宽)		x10(10倍)	
Accuracy (精度)		$\pm 3\%$	
Trigger system (触发系统)			
Trigger mode (触发模式)		NORM, AUTO, TV-V, TV-H (常态, 自动, 电视场, 电视行)	
Trigger source (触发源)		CH1, CH2, VERT, LINE, EXT	
Sensitivity and frequency (灵敏度与频率)		20Hz-20MHz(VERT)	20Hz-30MHz(VERT)
	AUTO, NORM	0.5div(INT), 0.5Vp-p(EXT)	
	TV-V, TV-H	At least 1 div or 1Vp-p (大于1格或1.0Vp-p)	
Input impedance (输入阻抗)		1M Ω	
X-Y operation (X-Y操作)			
X-Y phase difference (X-Y相位差)		$\leq 3^\circ$, DC-50kHz	
Others (其他)			
Calibration waveform (校正波形)		Frequency: 1KHz $\pm 20\%$, Voltage: 0.5V $\pm 10\%$ (频率: 1KHz $\pm 20\%$, 电压: 0.5V $\pm 10\%$)	
Power supply (电源)		220V/110V $\pm 10\%$; 50/60Hz	
Dimensions (尺寸)		310(W) x 130(H) x 370(D)mm	
Weight (重量)		8.5KG	

Dual channels/dual traces
40MHz / 60MHz

V-5040/V-5060

OSCILLOSCOPE

模拟示波器

特点

- 双通/双踪, X-Y方式
- 6英寸大屏幕, 高亮度示波管
- 高灵敏度触发, 达到1mV/格
- Ch1通道具有分段放大功能比一般示波器看得更清楚
- 电视同步分离电路可以观察到稳定的TV信号
- 触发方式: 自动、常态、电视场、电视行
- 垂直方式: CH1, CH2, 交替, 断续, 相加
- X-x10, Y-x5
- 相位正负反转
- CH1同步输出
- 输入AC电压220V(110V可选)

FEATURES

- DC-40MHz/DC-60MHz
- 6" display, high brightness oscilloscope tube
- High sensitivity of triggering, up to 1mV/division
- CH1 channel incremental magnification function for clearer observation than ordinary oscilloscope
- TV synchronous separation circuit for displaying stable TV signal
- Triggering mode: AUTO/NORM/TV-V/TV-H
- X-x10/Y-x5
- CH1 Sync output
- Dual channels/dual traces, X-Y mode
- Vertical: CH1/CH2/ALT/CHOP/ADD
- Polarity inversion
- Power supply: AC 220V (110V optional)

SPECIFICATIONS	MODEL	V-5040	V-5060
CRT		6 inch rectangular screen with internal graticule, 8x10div (1div=1cm) (6英寸带内部格画线的屏幕 8x10格, 1格=1cm)	
Bandwidth (带宽)		40MHz	60MHz
Vertical deflection (垂直偏向)			
Display model (显示模式)		CH1, CH2, ADD, ALT, CHOP (CH1, CH2, 相加, 交替, 断续)	
Deflection factor (偏转因子)		5mV/div to 5V/div $\pm 3\%$, 1mV/div 1V/div $\pm 5\%$ (x5), 10 steps (5mV/格到5V/格, 5倍时: 1mV/格到1V/格, 10个档)	
Rise time (上升时间)		≤ 8.8 ns	
Max. input voltage (最大输入电压)		250V(DC+AC peak) ≤ 1 KHz	
Input Coupling (输入耦合)		AC, DC, GND	
Polarity selection (极性选择)		+ or - (CH2 only) (仅CH2)	
Horizontal deflection (水平偏向)			
Display mode (显示模式)		1, 10, X-Y	
Time base (时基)		0.2 μ s/div to 0.2s/div, 9 ranges (0.2 μ s/格到0.2s/格 9个档)	
Sweep magnification (扫描展宽)		x10(10倍)	
Ch1 ALT Magnification (交替展宽)		x10(10倍)	
Accuracy (精度)		$\pm 3\%$	
Trigger system (触发系统)			
Trigger mode (触发模式)		NORM, AUTO, TV-V, TV-H (常态, 自动, 电视场, 电视行)	
Trigger source (触发源)		CH1, CH2, VERT, LINE, EXT	
Sensitivity and frequency (灵敏度与频率)		20Hz-40MHz(VERT)	20Hz-60MHz(VERT)
	AUTO, NORM	1.5div(INT), 0.8Vp-p(EXT)	
	TV-V, TV-H	At least 1 div or 1Vp-p (大于1格或1.0Vp-p)	
Input impedance (输入阻抗)		1M Ω	
X-Y operation (X-Y操作)			
X-Y phase difference (X-Y相位差)		$\leq 3^\circ$, DC-50kHz	
Others (其他)			
Calibration waveform (校正波形)		Frequency: 1KHz $\pm 20\%$, Voltage: 0.5V $\pm 10\%$ (频率: 1KHz $\pm 20\%$, 电压: 0.5V $\pm 10\%$)	
Power supply (电源)		220V/110V $\pm 10\%$; 50/60Hz	
Dimensions (尺寸)		310(W) x 130(H) x 370(D)mm	
Weight (重量)		9KG	

OS-3020A/3040A OS-3050A

OSCILLOSCOPE

带编码的开关示波器

特点

- 双通四踪, X-Y操作作为进口编码开关控制系统, 手感好, 可靠性高、寿命长, A/B扫描
- 1mV/格高灵敏度触发、低漂移
- 延迟扫描便于仔细检验主时基的细小部分
- 触发电平锁定功能便于建立触发点, 在很宽的信号偏移变化范围内均可锁定
- 专用的视频H和V同步分离器可以使视频波形异常稳定
- 释抑时间可调, 便于观察长时间的复杂波形
- CH1输出可使CH1放大器作为一个高增益的校准前置放大级使用
- 6英寸大屏幕, 进口高亮度示波管



FEATURES

- Dual channel/four trace, X-Y mode, imported coded switch provides good feeling, high reliability and long life, A/B Sweep.
- 1mV/div High sensitivity, low drift. ● Delayed sweep helps to closely examine small parts of main time base.
- Trigger level lock function establish the trigger point within the p-p signal swing and ensure rock-solid triggering despite wide variations in signal excursions.
- Dedicated video H and V sync separator provides stable video waveform.
- Variable holdoff for viewing long, complicated wavetrains,
- CH1 OUTPUT enables scope's CH1 amplifiers to be used as a high-gain calibrated pre-amp.
- 6" display, imported high brightness CRT tube.

SPECIFICATIONS	MODEL	OS-3020A	OS-3040A	OS-3050A
CRT		6" rectangular screen with internal graticule, 8x10div (6英寸带内部格画线的屏幕 8X10格, 1格=1cm)		
Bandwidth (带宽)		20MHz	40MHz	50MHz
Vertical deflection (垂直偏向)				
Display model (显示模式)		CH1, CH2, ADD, ALT, CHOP (CH1, CH2, 相加, 交替, 断续)		
Deflection factor (偏转因子)		5mV/div to 5V/div $\pm 3\%$, 1mV/div to 1V/div $\pm 5\%$ ($\times 5$), 10steps (5mV/格到5V/格, 5倍时: 1mV/格到1V/格, 10个档)		
Rise time (上升时间)		$\leq 17.2\text{ns}$		
Max. input voltage (最大输入电压)		250V(DC+AC peak) $\leq 1\text{kHz}$		
Input Coupling (输入耦合)		AC, DC, GND		
Polarity selection (极性选择)		+or-(CH2 Only) (仅CH2)		
Horizontal deflection (水平偏向)				
Display mode (显示模式)		1, 10, X-Y		
Time base (时基)		0.2 $\mu\text{s}/\text{div}$ to 0.2s/div, 9 ranges (0.2 $\mu\text{s}/\text{格}$ 到0.2s/格, 9个档)		
Sweep magnification (扫描展宽)		$\times 10$ (10倍)		
Accuracy (精度)		$\pm 3\%$		
Trigger system (触发系统)				
Trigger mode (触发模式)		NORM, AUTO, TV-V, TV-H (常态, 自动, 电视场, 电视行)		
Trigger source (触发源)		CH1, CH2, VERT, LINE, EXT		
Sensitivity and frequency (灵敏度与频率)		20Hz~20MHz (VERT)	20Hz~40MHz (VERT)	20Hz~50MHz (VERT)
	AUTO, NORM	0.5div(INT), 0.5Vp-p(EXT)		
	TV-V, TV-H	At least 1 div or 1Vp-p (大于1格或1.0Vp-p)		
Input impedance (输入阻抗)		1M Ω		
X-Y operation (X-Y操作)				
X-Y phase difference (X-Y相位差)		$\leq 3^\circ$, DC-50kHz		
Others (其他)				
Calibration waveform (校正波形)		Frequency: 1kHz $\pm 20\%$, Voltage: 0.5V $\pm 10\%$ (频率: 1kHz $\pm 20\%$, 电压: 0.5V $\pm 10\%$)		
Power supply (电源)		220V/110V $\pm 10\%$; 50/60Hz		
Dimensions (尺寸)		310(W) \times 130(H) \times 370(D)mm		
Weight (重量)		8.5KG		

60MHz / 100MHz DUAL CHANNELS/FOUR TRACES

OSCILLOSCOPE

OS-3060G OS-3100G

OSCILLOSCOPE

模拟示波器

特点

- 频率带宽: OS-3060G: DC-60MHz
OS-3100G: DC-100MHz
- 双通四踪, X-Y方式
- 数字直读, 记忆功能
- 6英寸大屏幕, 高亮度示波管
- X: 2mV-5V; Y: 50ns-0.5s
- X-x10, Y-x10
- 触发方式: 自动, 电视, H场等。

FEATURES

- Bandwidth: OS-3060G: DC-60MHz, OS-3100G: DC-100MHz
- Digital readout directly, memory function
- 6" display, high brightness oscilloscope tube
- Trigger mode: AUTO/NORM/TV-V/TV-H
- Dual channels/four traces, X-Y mode
- X-x10, Y-x10
- X: 2mV~5V; Y: 50ns~0.5s

SPECIFICATIONS	MODEL	OS-3060G	OS-3100G
CRT		6-inch rectangular type with internal graticule, 8x10div (1 DIV = 1cm)	
Bandwidth (带宽)		60MHz	100MHz
Vertical deflection (垂直偏向)			
Sensitivity (灵敏度)		2mV/Div-5V/div, 11 steps in 1-2-5 sequence.	
Sensitivity accuracy (灵敏度准确度)		$\pm 3\%$ (in middle 5 Divs)	
Bandwidth (带宽)		DC-60MHz	DC-100MHz
Rise time (上升时间)		5.9ns	
Signal Delay (信号延时)		Rising edge observable	
Max. Input Voltage (最大输入电压)		400V(DC+AC) $\leq 1\text{kHz}$	
Input Coupling (输入耦合)		AC, DC, GND	
Input Impedance (输入阻抗)		Approx. 1M Ω $\pm 2\%$ 25pF	
Vertical Modes (垂直模式)		CH1, CH2, CHOP, ALT, ADD, CH2 INV.	
CHOP Frequency (重复频率)		250kHz	
Polarity Inversion (极性反转)		Only for CH2	
HORIZONTAL SYSTEM (水平偏向)			
Sweep Modes (扫描模式)		Main A, ALT, Delay B	
A Sweep time (A扫描时间)		50ns-0.5s/div, continuously variable(UNCAL)	
B sweep time (B扫描时间)		50ns-50ms/div	
Accuracy (精确度)		$\pm 3\%$ ($\pm 5\%$ with $\times 10$ MAG)	
Sweep Magnification (放大倍率)		$\times 10$ (max. sweep time 5ns/div)	
Hold off time (释抑时间)		Variable	
Delay time (延迟时间)		1 μs -5s	
TRIGGER SYSTEM (触发系统)			
Trigger mode (触发模式)		NORM, AUTO, TV-V, TV-H	
Trigger source (触发源)		CH1, CH2, LINE, EXT	
Trigger Coupling (输入耦合)		AC, DC, LFR, HFR	
Trigger Slope (触发频率)		+ , - , TV Sync.	
Trigger sensitivity (触发灵敏度)	Mode	OS-3060G(INT/EXT)	OS-3100G(INT/EXT)
	AUTO	0.5DIV/50mV(20Hz-10MHz) 1.5DIV/150mV(10MHz-40MHz)	0.35DIV/50mV(20Hz-20MHz) 1.5DIV/150mV(20MHz-100MHz)
	NORM	0.5DIV/50mV(DC-10MHz) 1.5DIV/150mV(10MHz-40MHz)	0.5DIV/50mV(DC-20MHz) 1.5DIV/150mV(20MHz-100MHz)
	TV	1DIV/200mV(sync signal)	1DIV/200mV(sync signal)
Trigger Offset (触发偏置)		INT: ± 4 div or more, EXT: ± 4 V more	
Max. input voltage (最大输入电压)		400V(DC+AC peak) at 1 kHz	
X-Y MODE (X-Y模式)			
Sensitivity Accuracy (灵敏度精度)		X-axis: CH1, CH2: 2mV-5V/div $\pm 3\%$, EXT: 0.1 V/div $\pm 5\%$, Y-axis: CH1, CH2: 2mV-5V/div $\pm 3\%$	
CURSOR READOUT (光标读出)			
Cursor Measurement (光标测量)		Cursor Measurement Function: ΔV , ΔT , $1/\Delta T$, Cursor Resolution: 1/25 div.	
Cursor Resolution (分辨率)		1/100 div	
Cursor Range (光标有效范围)		Vertical: ± 3 DIV, Horizontal: ± 4 div	
Save & Recall (记忆功能)		10 settings	
OTHERS (其他)			
Line power (电源)		110V/220V ± 10 selectable, 50Hz/60Hz	
Dimensions (尺寸)		Meas: 450(L) \times 310(W) \times 150(H)mm	
Weight (重量)		10kg	

V-212A/V-5030A V-5040A/5060A

OSCILLOSCOPE

模拟示波器

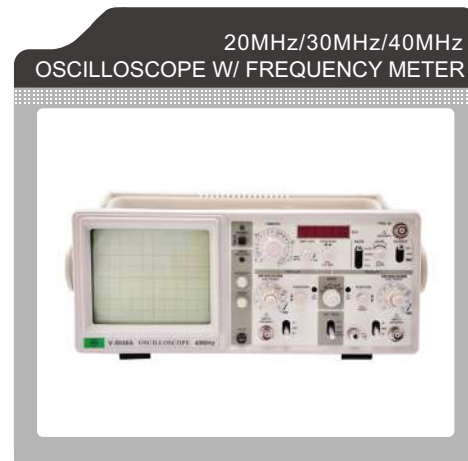
特点

- 带6位频率显示功能
- 双通/双踪, X-Y方式
- 6英寸大屏幕, 高亮度示波管
- CH1 具有分段放大功能, 比一般示波器看得更清楚
- 高灵敏度触发, 达1mV/格
- 电视同步分离电路可观察稳定的TV信号
- 触发方式: 自动、常态、电视场、电视行
- 垂直方式: CH1, CH2, 交替, 断续, 相加
- X-×10, Y-×5
- 相位正负反转
- CH1同步输出

FEATURES

- DC-20MHz/DC-30MHz/DC-40MHz /DC-60MHz
- Dual channels/dual traces, X-Y mode
- CH1×10 magnification alternative
- TV synchronous separation circuit enable to observe stable TV signal
- Trigger mode: AUTO/NORM/TV-V/TV-H
- X-×10, Y-×5
- CH1 Sync. Output
- With 6 digit frequency meter
- 6" display, high brightness oscilloscope tube
- High sensitivity up to 1mV/division
- Vertical mode: CH1/CH2/ALT/CHOP/ADD
- Polarity inversion

SPECIFICATIONS	MODEL	V-212A	V-5030A	V-5040A	V-5060A
Bandwidth (带宽)		20MHz	30MHz	40MHz	60MHz
CRT		6 rectangular screen with internal graticule, 8×10div. (1div=1cm) (6英寸带内部格画线的屏幕8×10格, 1格=1cm)			
Vertical deflection (垂直偏向)					
Display model (显示模式)		CH1, CH2, ADD, ALT, CHOP (CH1, CH2, 相加, 交替, 断续)			
Deflection factor (偏转因子)		5mV/div to 5V/div ± 3% (1mV/div to 1V/div ± 5% in ×5) (5mV/格到5V/格±3%, 5倍时: 1mV/格到1V/格±5%)			
Rise time (上升时间)		≤17.2ns	≤11.8ns	≤8.8ns	≤5.9ns
Max. input voltage (最大输入电压)		250V(DC+AC peak)≤1KHz			
Input Coupling (输入耦合)		AC, DC, GND			
Polarity selection (极性选择)		+ or - (CH2 only) (仅CH2)			
Horizontal deflection (水平偏向)					
Display mode (显示模式)		1, 10, X-Y			
Time base (时基)		0.2μs/div to 0.2s/div in 9 steps. (0.2μs/格到0.2s/格 9档)			
Sweep magnification (扫描展宽)		×10(10倍)			
Ch1 ALT Magnification (交替展宽)		×10(10倍)			
Accuracy (精度)		±3%			
Trigger system (触发系统)					
Trigger mode (触发模式)		NORM, AUTO, TV-V, TV-H (常态、自动、电视场、电视行)			
Trigger source (触发源)		CH1, LINE, EXT, INT			
Input impedance (输入阻抗)		1MΩ			
X-Y operation (X-Y操作)					
X-Y phase difference (X-Y相位差)		≤3°, DC-50kHz			
Frequency Meter (频率计)					
Measurement Range (测量范围)		0-20MHz	0-30MHz	0-40MHz	0-60MHz
Power supply (电源)		220V/110V±10%; 50/60Hz			
Dimensions (尺寸)		310(W) × 130(H) × 370(D)mm			
Weight (重量)		8.5kg	8.5kg	9kg	9kg



Mz530

SPECTRUM'S PROBE

频谱探头

Mz530探头是探测射频电磁场的理想工具, 包括交阻探头、磁场探头和电场探头。它是电磁干扰认证测试不可缺少的手段。当与频谱分析仪或测量接收机连用时, 使用探头可以找出或划定电磁干扰波。同样可以评测电路板和开发样机的电磁兼容问题。帮助使用者估计发射场及加屏蔽后的性能比较等。详见Mz530使用说明书。

技术参数:

频率范围: 0.1到1000MHz
输出阻抗: 50Ω
输出插头: BNC
输入电容: 约2PF
输入电平(MAX): +10dBm(根据频率范围), 直流电压: 20V
供电电压: DC+6V 电流8mA(磁场探头), 5mA(交阻探头), 24mA(电场探头)
尺寸: 40x19x195mm

Mz530 probes are ideal tools for detecting the electromagnetic fields of radio frequency. They include resistance probes, magnetic field probes and electric field probes. They are indispensable tools for test in pre-accreditation of electromagnetic interference. When the probes are used with spectrum analyzer or measurement receiving unit, they can be used to find or define the electromagnetic interference wave, and at the same time can be used to evaluate the EMI of PCBs and newly developed sample units. They can help users to evaluate the performance comparison of the transmitting field and after adding the shield. See the instruction manual of Mz530 for more details.

Technical specifications:

- Frequency range: 0.1- 1000MHz
- Output jack: BNC
- Maximum input level: + 10dBm (according to frequency range), DC voltage: 20V
- Power supply voltage: +6V DC Current: 8mA (probe for magnetic field), 5mA (probe for resistance field), 24mA (probe for electric field)
- Output impedance: 50Ω
- Input capacitance: about 2PF
- Dimensions: 40X19X195mm

PROBE

OSCILLOSCOPE'S PROBE

示波器系列探头

20MHz
40MHz
60MHz
100MHz



SM5005/SM5006 SM5010/SM5011

SPECTRUM ANALYZER

频谱分析仪

SM5005/SM5006/SM5010/SM5011频谱分析仪适用于电子产品开发研制的先期测试, CATV/MATV系统的故障检查, 蜂窝电话/传呼系统的测试和电磁兼容性的诊断等。和Mz530近场探头组合, 可对射频漏场进行检测。

SM5006/SM5011装有跟踪信号发生器; 频谱仪和跟踪信号发生器组合使用可以使它完成其它扫频系统做不到的事情, 如扫频仪、示波器等。

图为SM5005/SM5011外观, 和SM5006/SM5011外观有部分不同。



SM-5005/5006/5010/5011 spectrum analyzer is used for the early test in the development of electrical products, troubleshooting of CATV/MATV system as well as the test and trouble diagnosis of cellular phone/paging systems. Combined with the near field probes of Mz530 optimal, it can detect the missing field of radio frequency.

SM-5006/5011 is equipped with tracing signal generator, and in the combined use of spectrum analyzer and tracing signal generator, it can complete the work which cannot be done by other frequency sweep, such as sweep generator, oscilloscope, etc.

The picture shows the appearance of the SM5005/SM5011, which is partially different from the appearance of the SM5006/SM5011.

SPECIFICATIONS	MODEL	SM5005	SM5010	SM5006	SM5011
Input frequency response(输入频响)		500MHz, 3dB	1050MHz, 3dB	500MHz, 3dB	1050MHz, 3dB
Display accuracy of central frequency(中心频率显示精度)		±200KHz (frequency sweep width +200KHz) (扫频宽度+200KHz)			
Accuracy of mark frequency(标记频率精度)		±0.1% (frequency sweep width +100KHz) (扫频宽度+100KHz)			
Frequency display resolution(显示分辨率)		100KHz (4 1/2 bit LED display) (4 1/2 位 LED 显示)			
Frequency sweep width(扫频宽度)		0.1MHz/div, 100KHz/div with 1, 2 and 5 step system And 0Hz/div (0 frequency sweep) Accuracy: ±10% (each range) (0.1MHz/div到100KHz/div按1, 2, 5进制)(和0Hz/div(0扫频)精度: ±10%(各档))			
Intermediate frequency bandwidth(中频带宽)		20KHz and 400KHz (20KHz和400KHz)			
Video filter(视频滤波器)		(When on) 4KHz (按通时)4KHz			
Amplitude range(幅度范围)		-107~+13dB			
Reference level(参考电平)		-27dB~+13dB (10dB for every step) ±2dB (-27dB到+13dB (每级10dB)±2dB)			
Average noise level(平均噪声水平)		-97dB(20KHz intermediate frequency width) (中频带宽20KHz)			
Display range of CRT screen(CRT显示范围)		80 dB(10dB/div)			
Error of vertical display(垂直显示误差)		±2dB (2 With attenuator) 250MHz signal (±2dB(2.加衰减器)250MHz信号)			
Input attenuator(输入衰减器)		0~40dB (4x10dB step) error: +/-1dB/10dB (0到40dB(4x10dB步进)误差: ±1dB/10dB)			
Maximum input level(最大输入电平)		+10dBm, +25V DC (input attenuator set at 0dB) (+10dBm, +25V DC (输入衰减器0dB), +20dBm (input attenuator set at 40dB) (+20dBm(输入衰减器置于40dB))			
Frequency stability(频率稳定性)		Over 150KHz/hour (优于150KHz/小时)			
Input socket type(输入插座类型)		BNC			
Input impedance(输入阻抗)		50Ω			
Power supply(电源)		220V/110V; ±10%; 50Hz/60Hz			
Tracing signal generator(SM5006 only)(跟踪信号发生器)					
Input frequency response(输入频响)				0.15~500MHz, 3dB	
Output level range(输出电平范围)				-50~+1dBm (4x10dB) ±3dB	
Output attenuator(输出衰减器)				0~40dB (4x10dB step) error: ±1dB/10dB	
Input socket type(输入插座类型)		+6V (for probe) (+6V(供探头使用))		BNC	
Input impedance(输入阻抗)		Impedance of load ≥16W (负载阻抗≥16W)			
Others(其它)					
DC output(直流输出)					
AM demodulation output(AM解调输出)					

TTL/CMOS 2MHz/3MHz/5MHz



MFG-8202/8203 8205

AM FM FUNCTION GENERATOR

函数信号发生器

特点

- 低失真, 高稳定度
- 具有线性及对数扫频功能
- 扫描时间和宽度可调
- 外部电压控制频率(VCF)
- 内外调制AM/FM, 带调制度控制
- 可输出TTL/CMOS兼容之信号
- 输出正弦波, 方波, 三角波和斜波等七种之多的波形
- 主输出信号具有直流补偿和40dB衰减功能
- 内置0.1Hz-30MHz频率计功能

FEATURES

- Low distortion, high stability
- Sweep time and width adjustable
- Output signal compatible with TTL/CMOS
- Internal and External modulation AM/FM with modulation control
- Seven types of waveforms such as Sine, Square, triangle and ramp

- Linear and logarithmic sweep function
- External Voltage Control Frequency(VCF)
- Frequency response at 0.1Hz~30MHz

SPECIFICATIONS	MODEL	MFG-8202	MFG-8203	MFG-8205
Frequency range(频率范围)		0.1Hz-2MHz	0.1Hz-3MHz	0.1Hz-5MHz
Output Amplitude(输出幅度)		10Vp-p(50Ωload)		
Output impedance(输出阻抗)		50Ω ±10%		
Attenuation(衰减)		-20dB ±1dB		
DC Offset(直流偏置)		<-5V to >+5V(50Ωload)		
Duty rate(占空比控制)		80%: 20%: 80%		
Display(显示器)		6 digit LED display (6位 LED 显示)		
Amplitude control(输出幅度控制)		0dB/20dB and fine tune (0dB/20dB 和微调)		
Sine waveform(正弦波)				
Distortion(失真度)		≤1%, 0.5Hz~100kHz		
Flatness(平坦度)		≤0.3dB(<200kHz)	≤0.3dB(<300kHz)	≤0.3dB(<500kHz)
		≤0.53dB(≥200kHz)	≤1dB(≥300kHz)	≤1dB(≥500kHz)
Square(方波)				
Rise/fall time(上升/下降时间)		≤30ns		
VCF output(VCF输出)				
Input voltage(输入电压)		0V~10V ±1V(100:1)		
Sweep operation(扫频操作)				
Sweep width(扫频宽度)		Max. 100:1 adjustable (最大100:1连续可调)		
Sweep mode(扫频模式)		Linear/Logarithmic selectable (线性/对数开关切换)		
Frequency meter(频率计)				
Measuring Range(测量范围)		0.1Hz~30MHz		
Internal/external(内部/外部)		Selectable (开关可供选择)		
Resolution(分辨率)		Max. 10nHz at 1Hz (最大1Hz为10nHz)		
		0.1Hz at 50MHz (50MHz为0.1Hz)		
Sensitivity(灵敏度)		≤35mVrms (5Hz~30MHz)		
Input impedance(输入阻抗)		1MΩ/150pF		
Power supply(电源)		220V/110V±10%; 50Hz/60Hz		
Dimension(尺寸)		250 (W) x 100 (H) x 260 (D) mm		
Weight(重量)		4kg		

MFG-2125

FUNCTION GENERATOR

函数信号发生器

特点

- 低失真, 高稳定性
- 具有线性及对数扫频功能
- 扫描时间和宽度可调
- 内外调制AM/FM, 带调制控制
- 可输出TTL/CMOS兼容之信号
- 输出正弦波、方波、三角波和斜波等波形
- 内置0.1Hz~160MHz高精度频率计
- 带RS232接口, 带USB接口

FEATURES

- Low distortion, high stability
- Linear and logarithmic sweep function
- Sweep time and width adjustable
- Output signal compatible with TTL/CMOS
- Frequency response at 0.1Hz~160MHz
- Internal and External modulation AM/FM with modulation control
- Seven types of waveforms such as Sine, Square, triangle and ramp
- RS232, USB



RS232 INTERFACE
FSK/ASK/AM/FM

1Hz~30MHz FREQUENCY COUNTER
2MHz/5MHz/10MHz/13MHz/15MHz



MFG-3002/3005

3010/3013/3015

FUNCTION GENERATOR

函数信号发生器

特点

- 产生频率2MHz/5MHz/10MHz/13MHz/15MHz
- 输出波形: 正弦波, 三角波, 方波, 斜波, 正向或负向脉冲, 锯齿波等
- 具有VCF输入控制功能
- TTL/CMOS 可以 OUTPUT 作同步输出
- 失真10Hz-100kHz, 小于1%
- 频率响应0.1Hz-100kHz, 不大于±0.5dB
- 计频1Hz-30MHz

FEATURES

- Frequency of the models: 0.1Hz~2MHz/5MHz/10MHz/13MHz/15MHz
- Output waveform: Sine, Triangle, Square, Ramp, Pulse
- TTL/CMOS and OUTPUT synchronous output
- 1Hz~30MHz frequency counter
- Voltage Control Frequency (VCF) capability
- Less than 1% distortion at 10Hz~100kHz
- frequency response at 0.1Hz~100kHz

SPECIFICATIONS	MODEL	DDS-2125	FM Modulation (CH1)(FM调制)
Waveform types 波形		Sine, square, triangle, pulse, noise and arbitrary waves (including DC)	Carrier wave(载波)
Sine 正弦		1uHz~25MHz	Source(源)
Square 方波		1uHz~5MHz	Internal/external
Triangle 三角波		1uHz~500kHz	Modulation wave(调制波形)
Noise 3dB 噪声		70MHz Bandwidth	Sine, square, triangle and ramp
Pulse 脉冲		100kHz~5MHz	Modulation frequency(调制频率)
Arbitrary wave 任意波		1uHz~5MHz	0~Maximum carrier frequency
Frequency Resolution 频率分辨率		1uHz	FSK Modulation (CH1)(FSK调制)
Frequency Accuracy 频率准确度		±5ppm	Carrier wave(载波)
Sine Wave Characteristics 正弦波特性			Sine, square, ramp, pulse and arbitrary waveforms (excluding DC)
Harmonic distortion(CH1)1Vpp 谐波失真		0~1MHz: <45dB; 1MHz~10MHz: <40dB; 10MHz~20MHz: <30dB; 20MHz~40MHz: <25dB	Source(源)
Harmonic distortion(CH2)1Vpp 谐波失真		0~1MHz: <45dB; 1MHz~40MHz: <40dB	Internal/external
Total harmonic distortion 总谐波失真		<0.2% (20Hz~20kHz, 1Vpp)	Modulation wave(调制波形)
Sine Wave Signal Characteristics 正弦波信号特性			Square wave of 50% duty ratio
Rise/fall 上升/下降		<20ns	Keying frequency(键控频率)
Overshoot 超调		<5%	2MHz~1MHz
Duty cycle 占空比		≤100kHz: 1%~99%; ≤5MHz: 20%~80%; ≤10MHz: 40%~90% (0.1% resolution)	ASK Modulation (CH1)(ASK调制)
Dissymmetry(50% duty cycle) 不对称		1% Period ±5%	Carrier wave(载波)
Jitter 抖动		6ns±0.1% Period	Sine, square, ramp, pulse or arbitrary waveforms (excluding DC)
Ramp Wave Characteristics 斜坡特性			Source(源)
Linearity 线性度		≤0.1% Peak output	Internal/external
Symmetry 对称		0~100.00% (resolution 0.1%)	Modulation wave(调制波形)
Pulse Wave Characteristics 脉冲特性			Square wave of 50% duty ratio
Pulse width 脉冲宽度		Min 20ns; 1ns resolution	Up-ramp wave of 100% symmetry ratio; Up-ramp wave of 0% symmetry ratio
Edge transition Time 边缘过渡时间		Min 20ns	Phase offset(相位偏移)
Overshoot 超调		<5%	0°~360°
Jitter 抖动		6ns±0.1% Period	Frequency Sweep (CH1)(频率扫描)
Arbitrary Wave Characteristics 任意波特性			Carrier wave(载波)
Sampling speed 采样速度		160MSa/s	Sine, square, ramp, pulse and arbitrary waveforms (excluding DC)
Waveform amplitude resolution CH1 分辨率		12bits	Source(源)
Waveform amplitude resolution CH2 分辨率		10bits	Internal/external
Waveform length CH1 波形长度		16k	Modulation wave(调制波形)
Waveform length CH2 波形长度		4k	Square wave of 50% duty ratio
Minimum rise/fall time 上升/下降时间		<20ns	7~360°
Jitter 抖动		6ns±0.1% Period	PM Modulation (CH1)(PM调制)
Storage memory 存储容量		10 waveforms	Carrier wave(载波)
Output Characteristics 输出特性			Sine, square, ramp, pulse or arbitrary waveforms (excluding DC)
Amplitude (50%) 幅度		1mVpp~10Vpp ≤20MHz; 1mVpp~5Vpp >20MHz	Source(源)
CH1 Range 范围		1mVpp~20Vpp ≤20MHz	Internal/external
CH2 Range 范围		1mVpp~20Vpp ≤20MHz	Modulation wave(调制波形)
Accuracy 准确度		±1% set value ±1mVpp (1kHz Sine, 0 offset, >10mVpp)	Square wave of 50% duty ratio; Up-ramp wave of 100% symmetry ratio; Up-ramp wave of 0% symmetry ratio
Resolution 分辨率		1mV or 3 bit	Phase offset(相位偏移)
CH1 Flatness 相对1K Sine 1Vpp 平坦度		±0.1dB ≤100kHz, ±0.3dB ≤5MHz, ±0.4dB ≤45MHz, ±1dB ≤70MHz	0°~360°
CH2 Flatness 相对1K Sine 1Vpp 平坦度		±0.1dB ≤100kHz, ±0.2dB ≤5MHz, ±0.2dB ≤45MHz, ±0.5dB ≤70MHz	Frequency Meter(频率计)
Offset (50%) 偏移		±1% set value ±1mVpp (1kHz Sine, 0 offset, >10mVpp)	Frequency range(频率范围)
CH1 Range 范围		±5Vpk, ac + dc	1Hz~100MHz
CH2 Range 范围		±1.5Vpk, ac + dc	Resolution(分辨率)
Accuracy 准确度		±1% set value ±5mV ±0.5% amplitude	6 bits
Protection 保护		Short circuit protection, automatically disables the waveform output when overloading	Voltage range and sensitivity
SYNC Output(SYNC) 输出		TTL compatibility	100mVpp~5Vpp
Level(电平)		TTL compatibility	(电压灵敏度)
Impedance(阻抗)		50Ω	input adjustment(输入调整)
Rise/fall time(上升/下降)		<25ns	input impedance: 1MΩ, coupled modes: AC
Maximum frequency(频率)		25MHz	Trigger (input 触发输入)
AM Modulation (CH1)(AM调制)			1/1 compatibility
Carrier wave(载波)		Sine, square, ramp, pulse and arbitrary waveforms (excluding DC)	Rise/Fall
Source(源)		Internal/external	Slope(斜)
Modulation wave(调制波形)		Sine, square, triangle and ramp	Pulse width(脉冲宽度)
Modulation frequency(调制频率)		2MHz~20kHz	>10ns
Modulation depth(调制深度)		0%~120%	Reaction time(反应时间)
			<500ns (burst), <10us (sweep frequency)
			Modulation Input(调制输入)
			Impedance(阻抗)
			1MΩ
			Signal range(信号范围)
			±5V ac/dc
			Power Supply(电源)
			Supply voltage(电压)
			200~240V, 45~65Hz
			Power consumption(能量消耗)
			<40W
			Display(显示)
			3.5-inch TFT LCD screen
			Resolution 分辨率
			480×320
			Color(颜色)
			16M color
			Environment(环境)
			Temperature range(温度范围)
			Operation: 10°C~40°C, Non-operation: -10°C~60°C
			Cooling method(冷却方式)
			Natural cooling
			Humidity range(湿度范围)
			Below +35°C: ≤90% relative humidity
			+35°C ~ +40°C: ≤60% relative humidity
			Interface(接口)
			RS232, USB Host/USB Device

SPECIFICATIONS	MODEL	MFG-3002	MFG-3005	MFG-3010	MFG-3013	MFG-3015
Frequency range(频率范围)		0.1Hz~2MHz	0.1Hz~5MHz	0.1Hz~10MHz	0.1Hz~13MHz	0.1Hz~15MHz
Output waveforms(输出波形)		Sine, Triangle, Square, Positive and Negative Pulse, Positive and Negative Ramp 正弦波、三角波、方波、斜波、正向或负向脉冲、锯齿波				
Output Impedance(输出阻抗)		50Ω ± 10%				
Output Amplitude(输出幅度)		Not less than 20Vp-p(open circuit); "10Vp-p (50Ω load)"				
DC Voltage(直流电压)		0~±10V continuously adjustable (0~±10V连续可调)				
Symmetry Range(对称度范围)		90:10 -- 10:90				
Rising Edge of Square		<100ns				
Sine Characteristic(正弦波特性)		<50ns				
Distortion(失真)		Less than (小于)1% at 10Hz~100kHz				
Frequency Response(频响)		0.1Hz~100kHz: less than (小于)±0.5dB 100kHz~2MHz: less than (小于)±1dB				
TTL/CMOS Output(输出)						
Level(电平)		TTL low level less than 0.4V in pulse wave, high level less than 3.5V. CMOS low less than 0.5V in pulse wave, high level 5V~14V continuously variable. TTL脉冲低电平小于0.4V, 高电平小于3.5V, CMOS脉冲低电平小于0.5V, 高电平小于5V~14V连续可调。				
Rising Time(上升时间)		Less than 100ns(小于100ns)				
VCF Input(输入)						
Input Voltage(输入电压)		-5V~0V ± 10%				
Max. volt-controlled(最大压控比)		1000:1				
Input Signal(输出信号)		DC~1KHz				
Frequency counter(频率计)						
Measuring Range(测量范围)		1Hz~30MHz				
Input Impedance(输入阻抗)		Not less than (不小于)1MW/20pF				
Sensitivity(灵敏度)		100mVrms				
Max. Input(最大输入)		150V(AC+DC)				
Input Attenuation(输入衰减)		20dB				
Accuracy(精度)		Less than (小于)0.003% ± 1 digit				
Line Power(电源)		220V/110V ± 10%, 50Hz/60Hz				
Dimension(尺寸)		310(W) x 100(H) x 260(D) mm				
Weight(重量)		4kg				

MAG-203D

SIGNAL GENERATOR

低频信号发生器

特点

- 先进线路设计均为进口器件安装,确保精度偏差极小
- 产生信号频率:10Hz~1MHz, ±3%
- 产生波形:正弦波和方波≤0.5
- 输出信号强度≥10Vp-p
- 60dB精确衰减,分6段设置



FEATURES

- Advanced circuit design with imported components ensure minimum accuracy deviation.
- Signal frequency: 10Hz~1MHz, ±3%
- Intensity of output signal: ≥10Vp-p
- Wave form:sine and squares≤0.5
- 60dB accurate attenuate in 6 steps

SPECIFICATIONS	MODEL	MAG-203D
Oscillation frequency (振荡频率)		x1 range: 10Hz to 100Hz(X1档:10Hz到100Hz) x10 range: 100Hz to 1KHz(X10档:100Hz到1KHz) x100 range: 1KHz to 10KHz(X100档:1K到10KHz) x1K range: 10KHz to 100KHz(X1K档:10KHz到100KHz) x10K range: 100KHz to 1MHz(X10K档:100KHz到1MHz)
Frequency accuracy (频率精度)		±3% +1Hz
Output impedance (输出阻抗)		600Ω
Output attenuator (输出衰减器)		0dB, 10dB, 20dB, 30dB, 40dB, 60dB (6 ranges for selection) (6档可选) (with an accuracy of ±1dB under a load of 600Ω) (600W负载时,准确率±1dB)
Characteristics of sine wave (正弦波特性)		
Output voltage (输出电压)		≥5Vrms
Frequency response (频率响应)		10Hz to 1MHz: ±0.5dB
Distortion (失真)		400Hz to 20KHz: ≤0.1% (400Hz到20KHz:≤0.1%) 100Hz to 100KHz: ≤0.3% (100Hz到100KHz:≤0.3%) (100Hz: x10 range) (100Hz:X10档) 50Hz to 200KHz: ≤0.5% (50Hz到200KHz:≤0.5%) 20Hz to 500KHz: ≤1% (20Hz到500KHz:≤1%) 10Hz to 1KHz: ≤1.5% (10Hz到1KHz:≤1.5%)
Characteristics of square wave (方波特性)		
Output voltage (输出电压)		≥10Vp-p
Rise/down time (上升/下降时间)		200ns (at maximum output) (在最大输出时200ns)
Duty ratio (占空比)		45:55 (1KHz, at maximum output) (45:55(1KHz,在最大输出时)
Synchronizing range (同步范围)		≤1% Vrms
Max input voltage (输入电压)		15V (DC+AC peak value) (15V(DC+AC峰值))
Nominal operation (工作环境 temperature/humidity)		10°C to 35°C/within 85%RH
Power supply (电源)		220V/110V ±10%; 50Hz/60Hz
Dimensions (尺寸)		128(W) x 190(H) x 239(D) mm
Weight(重量)		3kg

0.1Hz-2MHz

DIGITAL SIGNAL GENERATOR



FEATURES

- Signal frequency: 0.1Hz~2MHz, continuously variable
- Output attenuator: 0dB, 20dB, 40dB, 60dB
- Output level: 20Vp-p in open circuit, not less than 10Vp-p with 50W load
- Rising and falling edge of square not more than 35ns
- Sine distortion less than 1%, amplitude-frequency characteristic: ±0.3dB within 100kHz, ±1dB above 1MHz
- Frequency Meter: 10Hz~30MHz
- Wave form: square, sine
- Power supply: AC 220V(110V optional)

MAG-203AD

SIGNAL GENERATOR

数字信号发生器

特点

- 产生频率范围:0.1Hz-2MHz,连续可调
- 输出波形:方波、正弦波
- 输出衰减器:0dB,20dB,40dB,60dB
- 输出电平:开路时20Vp-p,50Ω负载时不小于10Vp-p值
- 方波前后沿不大于35ns
- 正弦波失真度小于1%,幅频特性100kHz内小于±0.3dB, 1MHz以上小于±1dB
- 频率计:10Hz~30MHz
- 输入AC电压220V(110V可选)

0.1Hz-15MHz

DIGITAL SIGNAL GENERATOR



FEATURES

- Signal frequency: 0.1Hz~15MHz, continuously variable
- Output attenuator: 0dB, 20dB, 40dB, 60dB
- Output level: 20Vp-p in open circuit, not less than 10Vp-p with 50W load
- Not more than 35ns rising edge of square within 2MHz
- Sine distortion less than 2%, amplitude-frequency characteristic: ±0.5dB within 2MHz, -3dB above 10MHz
- Wave form: square, sine
- Frequency Meter: 10Hz~30MHz
- Power supply: AC 220V(110V optional)

MAG-2015AD

SIGNAL GENERATOR

数字信号发生器

特点

- 产生频率范围:0.1Hz~15MHz,连续可调
- 输出波形:方波、正弦波
- 输出衰减器:0dB,20dB,40dB,60dB
- 输出电平:开路时20Vp-p,50Ω负载时不小于10Vp-p值
- 方波前沿2MHz内不大于35ns
- 正弦波失真度小于2%,幅频特性2MHz内小于-0.5dB, 10MHz以上小于-3dB
- 频率计:10Hz~30MHz
- 输入AC电压220V(110V可选)

MAG-450 SIGNAL GENERATOR

高频信号发生器

特点

- 先进线路设计均为进口器件安装, 确保精度偏差极小
- 产生信号频率100kHz~150MHz, $\pm 3\%$ 三次谐波可达450MHz
- 产生波形: 正弦波和调幅波
- 1kHz内调制信号达80%或100%的过调制, 用过调制信号来观察波形异变现象的优良功能
- 输出为RF/AM, 最大信号强度 $\geq 10V_{p-p}$
- 外调制可在50Hz~20kHz任意设定

FEATURES

- Advanced circuit design with imported components ensure minimum accuracy deviation.
- Signal frequency: 100kHz~150MHz, 3 harmonic up to 450MHz
- Output wave form: sine and amplitude-modulation wave
- External modulation signal can be set between 50Hz~20kHz
- RF/AM output, max. intensity $\geq 10V_{p-p}$

SPECIFICATIONS	MODEL	MAG-450
Frequency ranges(频段)		A: 100KHz~300KHz B: 300KHz~1MHz C: 1MHz~3.2MHz D: 3MHz~10MHz E: 10MHz~35MHz F: 32MHz~150MHz
Frequency range(频率范围)		100KHz~150MHz (3rd harmonic wave up to 450MHz 三次谐波达到450MHz)
Frequency accuracy(频率精度)		$\pm 3\%$
Output waveform(输出波形)		RF/AM signal waveform (RF/AM信号波形)
Output impedance(输出阻抗)		600 Ω
Radio frequency output(射频输出)		Over 100 mVrms (when frequency ≤ 35 MHz 在频率 ≤ 35 MHz时)
Level control(电平控制)		1mV~100mV
Internal modulation(内调制)		1KHz $\pm 2\%$ >2Vrms output (1KHz $\pm 2\%$ >2Vrms输出)
External modulation(外调制)		50Hz~20KHz for any setting (50Hz-20KHz任意设定)
Normal operation(工作环境) temperature/humidity		10°C to 35°C/within 85%RH
Power supply(电源)		220V/110V +/-10%; 50Hz/60Hz
Dimensions(尺寸)		128(W) x 190(H) x 239(D) mm
Weight(重量)		4kg

100kHz-150MHz
RF SIGNAL GENERATOR



100kHz-150MHz
DIGITAL RF SIGNAL GENERATOR



SG-4162AD SIGNAL GENERATOR

数字高频信号发生器

特点

- 信号发生器频率范围100kHz-150MHz
- 8位数字显示内部或外部信号的频率
- 内置频率计, 可测外部信号频率10Hz-150MHz
- 带内外部调制
- 输出正弦波, 且幅度可调

FEATURES

- Signal generator frequency range 100kHz-150MHz
- Built-in frequency meter, measuring external signal range 10Hz-150MHz
- Internal and external modulation
- 8-digit LED display internal and external frequency
- sine waveform output, and amplitude adjustable

SPECIFICATIONS	MODEL	SG-4162AD
Frequency range(频段)		A: 100kHz~300KHz B: 300kHz~1MHz C: 1MHz~3.2MHz D: 3MHz~10MHz E: 10MHz~35MHz F: 32MHz~150MHz 3rd harmonic up to 450MHz(三次谐波达到450MHz)
Frequency accuracy(频率精度)		\pm Resolution ± 1 digit(\pm 读数精度 ± 1 位)
RF output Amplitude(射频输出幅度)		100mVrms(at 35MHz)
Amplitude Control(输出幅度控制)		0dB/20dB and fine tune.(0dB/20dB和微调)
Modulation(调制)		INT. 1kHz(内部: 1KHz), EXT. 50Hz~20kHz(at <1Vrms), (外部: 50Hz~20KHz, 在<1Vrms)
Audio output(音频输出)		1kHz(fixed), Min. 1Vrms(1KHz固定, 最小1Vrms)
Frequency meter(频率计)		
Frequency range(频率范围)		Low frequency 10Hz~10MHz(低频: 10Hz~10MHz) High frequency 10MHz~150MHz(高频: 10MHz~150MHz)
Input sensitivity(输入电压)		Less than 50mV(小于50mV)
Max. input voltage(最大输入电压)		Approx. less than 3Vrms(约小于3Vrms)
Accuracy(精确度)		Low frequency 1Hz/High frequency 10Hz(低频1Hz/高频10Hz)
Input impedance(输入阻抗)		Low frequency 1M Ω /High frequency 50 Ω (低频1M Ω /高频50 Ω)
Operating Temperature(工作温度)		0°C~40°C
Weight(重量)		3.2kg

SG-1501B

SIGNAL GENERATOR

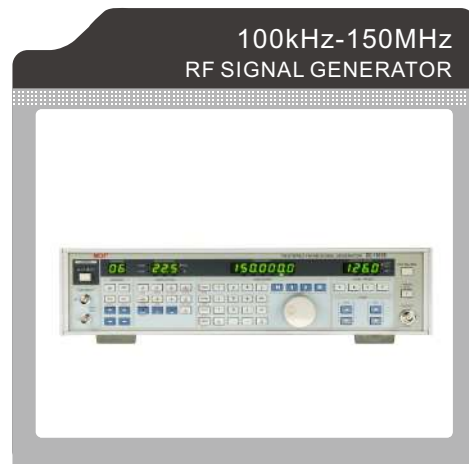
高频信号发生器

特点

- 可编程110MHz调频立体声
- 100种可编程步骤
- 锁相环合成发生器
- 输出电平-200dBμ至100dBμ(1dB级变)
- 7位数字LED频率显示

FEATURES

- Programmable up to 110MHz FM stereo
- 100 types of programmable steps
- Phase-locked loop digital synthesis generator
- Output Level -200dBμ to 100dBμ (in 1dB step)
- 7 digit LED frequency display



MVT-171

MVT-172

MILLIVOLTMETER

单/双针毫伏表

特点

- 先进线路设计均为进口器件安装,确保精度偏差极小
- 单/双指针显示,可独立操作或跟踪测试
- 测量频率5Hz~1MHz
- AC测量电压:1mV-100V,最大电压(DC+AC500V)
- dB测量:-80dB到+50dB
- 171带有电压调节测试/172可跟踪测量
- 微触360°数码开关自由旋转
- 10MΩ输入阻抗

FEATURES

- Advanced circuit design with imported components ensure minimum accuracy deviation.
- Single needle, operate solely
- AC Voltage: 1mV~300V,Max.(DC+AC 500V)
- Measuring with voltage adjustment
- 10MΩ input impedance
- Frequency: 5Hz~1MHz
- dB measurement:-80dB~50dB
- 360° rotation knob

FREQUENCY(频率)	SG-1501	SG-1501B
Range(范围)	100kHz~150MHz,(76MHz~110MHz, FM Stereo)	
Resolution(分辨率)	100Hz	
Accuracy(精确度)	5×10 ⁻⁶ (5ppm)	
GPIB		With GPIB
OUTPUT LEVEL(输出电平)		
Range(范围)	-20dBμ~100dBμ at open circuit,(-133dBm~13dBm into 50Ω termination)	
Resolution(分辨率)	0.1dB	
Accuracy(精确度)	±1dB at 100dBμ	
Attenuator Accuracy(衰减器精度)	±1.5dB(126~100dBμ),±1dB(20~100dBμ),±2dB(-20~20dBμ)	
Output Impedance(输出阻抗)	50Ω, VAWR less than 1.2	
Spurious & Harmonics(谐波)	≤-30dBc	
Residual Modulation(S/N)(残留调制)	FM Component:70dB or more,AM Component:50dB or more	
MODULATION(调制)		
Internal Modulation(内调制)	Frequency:400Hz, 1kHz	
External Modulation(外调制)	Input Impedance:10kΩ unbalanced±10%,Input Voltage:3Vp-p±2%	
FM Range(调频范围)	0~100kHz (at 1MHz~150MHz),Carrier Frequency×10% (at<1MHz)	
- Accuracy (精度)	±10% of maximum frequency deviation	
- Pre-Emphasis(预加重)	off, 25μsec,50μsec,75μsec	
- Distortion(失真度)	<0.06% (at 10.7MHz, 76~110MHz),<0.11% (at other range); with Dev=75kHz, AF 1kHz, Demod.BW=50Hz~15kHz,DE-emp.=50μsec	
AM Range(调幅范围)	0~60%	
- Resolution(分辨率)	0.1%	
- Accuracy (精度)	±5% at internal rate(100kHz~110MHz),±10% at internal rate(110MHz~150MHz)	
- Distortion(失真度)	<0.65% (at 400kHz~30MHz),< 1.5% (at other range),with Depth =30%,AF 1kHz, Demod. BW=50Hz~15kHz	
STEREO(立体声)		
Separation(分离度)	≥50dB(at 400Hz~1kHz),≥35dB(at 100Hz~10kHz),≥30dB(at 50Hz~15kHz)	
Pilot(导频)	19kHz ±2Hz	
Distortion(失真度)	<0.07% (at Main 90%,Pilot off)	
MEMORY(储存)		
Preset Keys(预置键)	FM:3.5kHz, 22.5kHz, 75kHz,AM:30%,Stereo:30%, 100%,Output Level:4points	
Memories(储存)	100 points	
OTHERS(其他)		
Power Requirements(输入电源)	115/230VAC, 50/60Hz	
Dimensions(尺寸)	115(H) × 430(W) × 310(D) mm	
Weight(重量)	Approx. 7kg	
Standard Accessories(标准配件)	Power Cable, BNC Cable,Operating Manual, Fuse	
Options(选件)	GPIB, Remote Controller	

SPECIFICATIONS	MODEL	MVT-171	MVT-172
Measuring Range(测量范围)		Voltage:1mV~100V in 12 steps(电压:1mV至100V分12档) dB:-80到+50dB ,dBm:-80到+52dBm (0dBm=1mV,600WΩ)	
Display Mode(显示模式)		Single-Needle(单针)	Dual-Needle(双针)
Measuring Mode(测量方式)		Measuring with voltage adjustment(带有电压调节测试) Traceable(可跟踪测量)	
Error(误差)		Within 3% at 1KHz, full scale. (1KHz测量下:满刻度3%内)	
Frequency Response(频率响应)		5Hz~1MHz:±10% 10Hz~500KHz:±5% 20Hz~200KHz:±3% 30Hz~100KHz:±2% Readout at 1KHz as a reference(以1KHz读值作参考点)	
Input Impedance(输入阻抗)		10MΩ±5%,45pF	
Max. Input Voltage(最大输入电压)		500V(DC+AC peak):1V~300V(500V(DC+AC峰值):1V到300V档) 100V (DC+AC peak):1mV~300mV(100V (DC+AC峰值):1mV到300mV档)	
Stability(稳定度)		±5% of full scale, at 10% variety of line voltage(电压作10%改变所造成的影响为满刻度的±5%)	
Survival Voltage(残余电压)		Less than 200μV at 1mV range and short-circuit of input(在1mV档,输入端短路时,低于200mV)	
Cross-talk(串音)		Independent:≤80dB connecting 600Ω load(独立:当一端接上600Ω负载时≤80dB) consistent:≤50dB connecting 600Ω load(一致:当一端接上600Ω负载时≤50dB)	
Gain(增益)		60dB	
Output Voltage(输出电压)		1Vrms ±20% at full scale(满刻度为1Vrms ±20%)	
Output Resistance(输出电阻)		600Ω ±20% at 1KHz(600Ω±20%在1KHz时)	
Distortion(失真)		Less than 1% at full scale(满刻度低于1%)	
Signal to Noise Ratio(信噪比)		More than 30dB at 0.3mV range(0.3mV档时大于30dB)	
Frequency Response(频率响应)		5Hz~500KHz:within ±3%(5Hz到500KHz:±3%内)	
Ambient(额定工作温度/湿度)		10°C~40°C/85%RH	
Power Supply(电源)		220V/110V ±10%; 50Hz/60Hz	
Dimension(尺寸)		128(W)x 190(H)x 239(D)mm	
Weight(重量)		3kg	3.5kg

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HFJ-8AD RF MILLIVOLTMETER

数显超高频毫伏表

特点

- 采用双二极管检波,低噪声深负反馈电路
- 测量电压范围1mV~10V
- 只用一只探头可测频率范围达100Hz~1000MHz
- 具有自动量程功能
- 3999位LCD数字显示



FEATURES

- Double diode rectifier, low-noise deep negative feedback circuit
- Voltage measuring range 1mV~10V
- Frequency range 100Hz~1000MHz using only one probe
- Auto range function

- LCD display with 3999 readout

SPECIFICATIONS	MODEL	HFJ-8AD
Input voltage range(输入电压范围)		1mV~10V (resolution: 1mV)Max. display 3999 Extended to 300V using 40dB voltage divider(OPTION) (1mV~10V, 可指示至:1mV,最大显示3999位,如使用40db分压器(选购件)扩展到300V) Full scale in 4 ranges are (满度值4档): 40 mV, 400 mV, 4V, 10V
Frequency range(频率范围)		100Hz~1000MHz(10Hz~1000MHz when using low frequency probe)(如选用低频探头可至10Hz~1GHz)
Voltage measuring range(电压测量范围)		-20~+40dBm(0dBm-0.224V,50Ωload)
Voltage error(电压测量误差)		≥40mV: ±1%±10digits ≥10mV: ±1.5%±20digits <10mV: ±2%±20digits
Frequency response error(固有频响误差) (Base on 100kHz)(以100kHz为基准)		100kHz~50MHz: ±3% 1kHz~600MHz ±8% 100Hz~1000MHz ±10% 10Hz~1000MHz ±15%(Low frequency probe)(选用低频探头)
Operation error(工作误差)		≥40mV: ±2%±10digits ≥10mV: ±3%±20digits <10mV: ±5%±40digits
Input impedance(输入阻抗)		≤15KΩ (at range 40mV), Capacitance:<2.5pF (40mV档, 输入电容:<2.5PF)
Power supply(电源)		220V/110V ±10%; 50Hz/60Hz
Dimension(尺寸)		210(W) x 140(H) x 245(D)mm
Weight(重量)		4kg

0-360V/1mA-30A PROGRAMMABLE DC ELECTRONIC LOAD



FEATURES

- Number operation and control
- Short-circuit, Battery,Dynamic test
- Panel and exterior trigger function
- Protection function:over-voltage,over-current,over-power,over-heat

EL3615A EL3630A ELECTRONIC LOAD

可编程直流电子负载

特点

- 全数字化操作与控制
- 可多机并用扩大负载能力
- 短路、电池、动态测试功能
- 远端电压测量
- 面板及外部触发功能
- 保护功能:过电压,过电流,
- 过功率,过热,极性反接

- Multi units used to multiple load ability
- Remote voltage measurement
- polarity connection in reverse

SPECIFICATIONS	MODEL	EL3615A	EL3630A
Rated value(额定值)	Input voltage(输入电压)	0-360V	0-360V
	Input current(输入电流)	1mA-15A	1mA-30A
	Input power(输入功率)	150W	300W
Range(量程)			
Load accuracy(基本精度)	0-36V	1mV	
	0-360V	10mV	
	0-3A	1mA	
Constant-voltage mode(定电压模式)	0-30A	10mA	
	1.5-36V	1mV	
Constant-current mode(定电流模式)	1.5-360V	10mV	
	0-3A	1mA	
Constant-resistance mode(定电阻模式)	0-30A	10mA	
	0.1Ω-10Ω	0.001Ω	
	10-99Ω	0.01Ω	
	100-999Ω	0.1Ω	
Constant-power mode(定功率显示)	1KΩ-4KΩ	1Ω	
	0-10W	1mW	
	10-100W	10mW	
Current display (电流显示)	100-300W	0.1W	
	0-3A	1mA	
	0-30A	10mA	
Voltage display(电压显示)	1.5V-36V	1mV	
	1.5-360V	10mV	
Power display(功率显示)	0-10W	1mW	
	10-100W	10mW	
	100-300W	0.1W	
Battery test(电池测试)	Input(输入)=0.8-120V	Max measurement capacity(最大测量容量)= 999A/H	
Dynamic test(动态测试)	Resolution(分辨率)=10 mA	Timer range(时间范围)=1-60000sec	
	Range of Pulse Width(脉冲宽度范围)	10ms-10s	

MCH-2811C

LCR METER

数字电桥

特点

- 低价位带标准功能
- 100Hz~10kHz, 3个典型测试频率
- 高稳定性



- 3 typical test frequencies in 100Hz to 10kHz

FEATURES

- Low price with standard functions
- High stability

SPECIFICATIONS	MODEL	2811C
Measurement Parameter(测量参数)		L-Q, C-D, R-Q
Test Frequency(测量频率)		100 Hz, 1 kHz, 10 kHz
Test Level(测试电平)		0.3 Vrms
Basic Accuracy(基本精度)		0.25%
Display Range(显示范围)	R	0.001 Ω ~ 99.99 MΩ
	C	0.01 pF ~ 9999 μF
	L	0.01 μH ~ 9999 H
	D	0.0001 ~ 9.999
	Q	0.001 ~ 9999
Sampling Rate(采样率)		Approx. 5 times/second
Equivalent Circuit(等效电路)		Series, Parallel.
Mode(量程模式)		Auto, Hold.
Calibration(校准)		Open circuit. Short circuit setting zero.
Measuring Terminals(测试端口)		5 Terminals
Display Mode(显示模式)		Direct reading
Operation Ambient(工作环境)		0°C ~ 40°C, ≤90% RH
Power supply(输入电源)		198 V ~ 242 V AC, 47.5 Hz ~ 52.5 Hz
Power consumption(功耗)		≤20 VA
Size(W×H×D)(尺寸)		360 mm×125 mm×320 mm
Weight(重量)		Approx. 3.5 kg



FEATURES

- Multiple functions with easy operation
- 6 typical test frequencies
- 2 selectable output impedances: 30Ω and 100Ω

8817/8817A

2817/2817D

2818

LCR METER

数字电桥

特点:

- 简便操作与强大功能的结合
- 大型白色背光LCD显示屏
- 6个典型测试频率
- 0.1V, 0.3V, 1.0V三个典型测试电平
- 30Ω/100Ω两种可选源阻抗

- Big white back-light LCD display
- 3 typical test levels: 0.1V, 0.3V and 1.0V

SPECIFICATIONS	MODEL	8817/8817A	MCH2817	MCH2818	MCH2817D	
Measurement Parameter(测量参数)		L/Q, C/D, R/Q, Z/Q, Z/D		Z, C, L, X, B, R, G, D, Q, θ	L/Q, C/D, R/Q, Z/θ, C/R, L/R	
Test Frequency(测量频率)		100Hz, 120Hz, 1kHz, 2kHz, 2kHz, 10kHz	100Hz, 120Hz, 1kHz, 10kHz, 20kHz, 30kHz, 60kHz, 100kHz	50Hz-200kHz (37 points)	100Hz, 120Hz, 1kHz, 10kHz, 30kHz, 60kHz, 100kHz	
Basic Accuracy(基本精度)		0.1%	0.05%	0.10%	0.10%	
Test Level(测试电平)		0.1Vrms, 0.3Vrms, 1.0Vrms				
Display Range(显示范围)	L	0.0001μH~99.999H	L	0.0001μH~9.9999kH	L	0.001μH~9999kH
	C	0.001pF~99999μF	C	0.00001pF~999.999mF	C	0.001pF~999.999μF
	Z, R	0.0001Ω~99.999MΩ	Z, R, X	0.00001Ω~99.999MΩ	Z, R, X	0.0001Ω~99.999MΩ
	D	0.00001~9.99999	D	0.00001~9.99999	D	0.0001~9.9999
	Q	0.00001~9999.9	Q	0.00001~9999.9	Q	0.001~9999.9
θ(Deg)	-179.999°~179.999°	θ(Deg)	-179.999°~179.999°	θ(Deg)	-179.999°~179.999°	
θ(Rad)	-3.14159~3.14159	θ(Rad)	-3.14159~3.14159	θ(Rad)	-3.14159~3.14159	
Δ%	0.00%~9999%	Δ%	-999.999%~999.999%	Δ%	-99.99%~99.99%	
Test Speed(测试速度)		Fast:20 times/s, Medium: 5.1 times/s, Slow:1.5 times/s		Fast:30 times/s, Medium: 11.1 times/s, Slow:1.5 times/s	Fast:16 times/s, Medium: 8 times/s, Slow:2 times/s	
Equivalent Circuit(等效电路)		Series, Parallel				
Ranging(档位)		Auto, Hold				
Triggering(触发)		Internal, Manual, External				
Averaging(平均)		1~99 times				
Zeroing(清零)		Open/Short/Sweep	Open/Short/Sweep			
Display Mode(显示模式)		Measured Value(直读), Absolute Deviation(Δ), Relative Deviation(Δ%)			Measured Value(直读), Absolute Deviation(Δ), Relative Deviation(Δ%)	
		Measured Value(直读), Absolute Deviation(Δ), Relative Deviation(Δ%), V/I			Measured Value(直读), Absolute Deviation(Δ), Relative Deviation(Δ%)	
Display(显示屏)		240 X 128 LCD		5 digits LED		
Output Impedance(输出阻抗)		30Ω, 100Ω				
Sorting Mode(分选模式)		4 sorting bins; Alarm volume control and Alarm status selection	11 sorting bins: 9 pass, 1 fail and 1 auxiliary		4 sorting bins; Alarm volume control and Alarm status selection	
Interface(接口)		RS-232, HANDLER	HANDLER, RS-232C, GPIB(Optional)			
Operating Ambient(工作环境)		10°C ~ 30 °C, ≤80%RH for precise measurement, 0°C ~ 40 °C, ≤90%RH for normal usage.				
Power supply(线电源)		198V-242V, 47.5Hz-63Hz				
Power Consumption(功耗)		≤30VA				
Size(尺寸)		320mm X 140mm X 400mm				
Weight(重量)		Approx. 3.5kg	Approx. 3.8kg	Approx. 4.5kg	Approx. 6kg	

MCH 直流稳压电源

MCH DC POWER SUPPLY

参数规格

额定工作条件及面板特征	
电源电压	220V±10% 50/60Hz (根据要求可以在110±10% 50/60Hz)
工作条件	温度:-10°C~40°C
相对湿度	<90%
储存条件	温度:-20°C~80°C
相对湿度	<80%

稳压状态

输出电压从0到标称值之间连续可调	
电压稳定度:	
电源稳定度	≤0.01%+2mV
负载稳定度	≤0.01%+2mV
恢复时间	≤100ms
纹波噪声	≤1mVrms(有效值)
温度系数	≤300PPM/°C

恒流状态

输出电流在0到标称值之间连续可调	
电流、负载变化稳定度	≤0.2%+3mA
纹波和噪声	≤3mArms

MCH 系列电源为高精度恒压, 恒流型直流稳压电源,

特点为精度高、可靠性强。适用于科技产品开发、实验室、

电子生产线及移动电话使用。

技术参数		0 to Nominal Value Continuously Variable
Constant Voltage(稳压状态)	Stability	Voltage: <0.01%+2mV Load: <0.01%+2mV
	Recovery Time	≤100ms
	Ripple & Noise	≤1mVrms(efficient value)
	Temperature Factor	≤300PPM/°C
Current, Load Constant Current(恒流状态)	Stability	0 to Nominal Value Continuously Variable
	Ripple & Noise	≤3mArms
	Line Power Supply	220V±10% 50/60Hz (Alterable if needed :110±10%50/60Hz)
Working Condition(工作条件)	Operating	Temperature:-10°C~40°C Moisture<90%
	Storage	Temperature:-20°C~80°C Moisture<80%

302D-II/303D-II 305D-II/K3010D-II K6010D-II

DC POWER SUPPLY

双通道直流电源

特点

- 高稳定度的双路直流电源
- 具有固定2A/5V输出功能
- 全功能输出保护功能
- CC/CV自动切换
- 电流/电压在标称值内连续可调

FEATURES

- High stability DC Power Supply
- Overall output protection
- Voltage and current continuously variable within nominal value
- Extra fixed 2A/5V output
- CC/CV auto switching



SPECIFICATIONS	MODEL	302D-II	303D-II	305D-II	K3010D-II	K6010D-II
Dual Output Voltage(双路输出电压)		0~30V				0-60V
Dual Output Current(双路输出电流)		0-2A	0-3A	0-5A	0-10A	0-10A
Display(显示)		3/4 digit voltage and current display(3/4位数字显示电压、电流)				
Fixed Output(固定输出)		5V/2A Fixed Output(5V/2A 固定输出)				
Others(其它)		Independent, series and Parauel modes(可独立、串联或并联使用)				
Dimension(尺寸)		260(W) x 165(H) x 300(D) mm				
Weight(重量)		Appro 7.8kg	Appro 8.9kg	Appro 9.4kg	Appro 12kg	Appro 12kg

30V/60V/2A/3A/5A LINEAR DC POWER SUPPLY



302A/303A/305A 302B/303B/305B 605D

DC POWER SUPPLY

线性直流稳压电源

特点

- 高稳定度的数显直流电源
- 具有固定5V/1A输出功能(只限“B”型号)
- 全功能输出保护功能
- 可满负载连续输出
- 电流/电压在标称值内连续可调
- 电压电流预置输出
- CC/CV自动切换

FEATURES

- High stability
- Overall output protection
- Voltage and current continuously variable within nominal value
- Voltage and current output preset
- Extra Fixed 5V/1A output(only for "B" model)
- Allow full scale long time operation
- CC/CV auto switching

SPECIFICATIONS	MODEL	302A	303B	305A	605D	302B	303B	305B
Variable Output(可变输出)								
Output Voltage(输出电压)		30V			60V	30V		
Output Current(输出电流)		2A	3A	5A	5A	2A	3A	5A
Source Regulation(源效应)		1 x 10 ⁻⁴ +3mV						
Load Regulation(负载效应)		1 x 10 ⁻⁴ +3mV						
Ripple & Noise(纹波)		≤1mV(rms)						
Display Error(显示误差)		≤0.5% + 1 digit						
Fixed Output(固定输出)								
Output Voltage(输出电压)						5V		
Output Current(输出电流)						1A		
Source Regulation(源效应)						≤5mV		
Load Regulation(负载效应)						≤15mV		
Ripple & Noise(纹波)						≤2mV rms		
Dimension(尺寸)		130 x 165 x 330 mm						
Weight(重量)		Appro 4.8kg	Appro 5.5kg	Appro 5.5kg	Appro 6.0kg	Appro 5.0kg	Appro 5.8kg	Appro 6.5kg

3205-II/3205-IV DC LINEAR POWER SUPPLY

多通道线性直流电源

特点

- 4位数显线性直流电源
- 可串联/并联/独立使用
- 全功能输出保护功能
- 4通道自动负载输出
- 电压/电流预置输出
- 过压/过流短路保护



DUAL & FOUR CHANNEL
DC POWER SUPPLY

FEATURES

- 4 Digital Display Linear DC Power Supply
- Full-function output protection function
- Voltage/Current Preset Output

- Series/Parallel/Independent Use
- Four-channel automatic load output
- Over-voltage/Over-current Short Circuit Protection

SPECIFICATIONS	MODEL	3205D-II	3205D-IV
Line Voltage(输入电压)		110V/220VAC,60Hz/50Hz(state before order)	
Voltage Display(电压显示)		Four digital tubes: 00.00; Resolution: 00.01V(4位数数码管:00.00;分辨率:00.1V)	
Current Display(电流显示)		Four digital tubes: 00.00; Resolution: 00.01A(4位数数码管:00.00;分辨率:00.1A)	
Display Error(显示误差)		±0.3%+1	
CH1 Output(CH1输出)		Adjustable DC voltage: 0~32V; adjustable DC current: 0~5A 可调直流电压0-32V; 可调直流电流0-5A	
CH2 Output(CH2输出)		DC fixed voltage: 5V; DC Fixed Current: 1A 固定直流电压:5V; 固定直流电流:1A	
CH3 Output(CH3输出)		Adjustable DC voltage: 0~6.5V; adjustable DC current: 3A(可调直流电压0-6.5V, 可调直流电流1A)	
CH4 Output(CH4输出)		DC fixed voltage: 5V; DC Fixed Current: 1A 固定直流电压:5V; 固定直流电流:1A	
Serial output(CH1 and CH2 only) (CH1, CH2通道串联)		Adjustable DC voltage: 0~60V; adjustable DC current: 5A. CH1 is connected in series with CH2 and the voltage is added.(可调直流电压0-60V; 可调直流电流5A, CH1与CH2串联, 电压相加)	
Parallel output(CH1 and CH2 only) (CH1, CH2通道并联)		Adjustable DC voltage: 0~32V; adjustable DC current: 10A. CH1 and CH2 are connected in parallel and the current is added.(可调直流电压0-30V; 可调直流电流10A, CH1与CH2并联, 电流相加)	
Output Power(输出功率)		2X150W; 2X5W	2X150W; 1X20W; 1X15W
Ripple(纹波)		≤3mV rms	
Source effect(源效应)		≤0.5%	
Load effect(负载效应)		≤0.3%	
Temperature Coefficient(温度系数)		300ppm/°C	
Fuse specifications(保险丝规格)		Φ5X20mm 7A/250 V	
working environment(工作环境)		0~40°C; <80%RH	
Dimension(尺寸)		275x 160 x 240 mm	
Weight(重量)		Appro 10kg	

DUAL CHANNEL
DC POWER SUPPLY



MCH-3205SK DC LINEAR PROGRAM MABLE POWER SUPPLY

双通道线性直流量控电源

特点

- 3位数显线性直流电源
- 可串联/并联/独立使用
- 全功能输出保护功能
- 2通道自动负载输出
- 电压/电流预置输出
- 过压/过流短路保护
- RS232接口

FEATURES

- 3 Digital Display Linear DC Power Supply
- Full-function output protection function
- Voltage/Current Preset Output
- Over-voltage/Over-current Short Circuit Protection

- Series/Parallel/Independent Use
- Four-channel automatic load output
- RS232

SPECIFICATIONS	MODEL	3205SK
Line Voltage(输入电压)		110V/220VAC,60Hz/50Hz(state before order)
Voltage Display(电压显示)		Three digital tubes: 000; Resolution: 0.01V-0.1V(3位数数码管:000;分辨率:0.01V)
Current Display(电流显示)		Three digital tubes: 000; Resolution: 0.01A-0.1A(3位数数码管:000;分辨率:0.01A)
Display Error(显示误差)		±0.3%+1
CH1 Output(CH1输出)		Adjustable DC voltage: 0~32V;(可调直流电压0-32V)
CH2 Output(CH2输出)		Adjustable DC current: 0~5A(可调直流电流0-5A)
CH3 Output(CH3输出)		DC fixed voltage:2.5V/3V/5V; DC Fixed Current: 2A(固定直流电压2.5/3.5/5V; 固定直流电流2A)
Serial output(CH1 and CH2 only) (CH1, CH2通道串联)		Adjustable DC voltage: 0~64V; adjustable DC current: 5A. CH1 is connected in series with CH2 and the voltage is added.(可调直流电压0-64V; 可调直流电流5A, CH1与CH2串联, 电压相加)
Parallel output(CH1 and CH2 only) (CH1, CH2通道并联)		Adjustable DC voltage: 0~32V; adjustable DC current: 10A. CH1 is connected in Parallel with CH2 and the voltage is added.(可调直流电压0-32V; 可调直流电流10A, CH1与CH2并联, 电压相加)
Output Power(输出功率)		2X150W; 2X5W; 1X6.6W; 1X160W
Ripple(纹波)		≤3mV rms
Source effect(源效应)		≤0.5%
Load effect(负载效应)		≤0.3%
Temperature Coefficient(温度系数)		300ppm/°C
Fuse specifications(保险丝规格)		Φ5X20mm 7A/250 V
working environment(工作环境)		0~40°C; <80%RH
storage temperature(存储温度)		0~0°C; <80%RH
Dimension(尺寸)		275x 160 x 240 mm
Weight(重量)		Appro 7kg

**K3020D/K3030D
K3050D/K6050D
K1004D/K1005D
K1204D/K1205D
K1504D/K1505D**

DC SWITCHING POWER SUPPLY

大功率可调直流电源

特点

- 大功率的开关直流电源
- 4A/5A/20A/30A/50A输出
- 全功能输出保护功能
- 允许定制“0-100A”“0-300V”，起订量≥100 pcs
- CC/CV自动切换
- 前段输出精细可调
- 大风扇加热敏控制

FEATURES

- High Power Switched DC Power Supply
- Full-function output protection function
- Heating Sensitive Control of Large Fan
- Alluded customized product from "0-100A" "0-300A", MOQ:≥100pcs
- 20A/30A Point Output
- Fine adjustable front output
- CC/CV Automatic Switchover



**3010D/3020D
DC LINEAR POWER SUPPLY**

大功率线性电源

特点

- 高稳定度的数显直流电源
- 全功能输出保护功能
- 电流/电压在标称值内连续可调
- 电压电流预置输出
- CC/CV自动切换

FEATURES

- High stability, digital display, DC power supply
- Current and voltage continuously adjustable within nominal value
- Voltage and current output preset
- Overall output protection function
- CC/CV auto switching

SPECIFICATIONS	MODEL	K3020D	K3030D	K3050D	K6050D	K1004D	K1005D	K1204D	K1205D	K1504D	K1505D	
Line Voltage(输入电压)		110V/220VAC,60Hz/50Hz(state before order)										
Variable Output(可调输出)												
Output Voltage(输出电压)		0-30V			0-60V	0-120V		0-120V		0-150V		
Output Current(输出电流)		0-20A	0-30A	0-50A	0-50A	0-4A	0-5A	0-4A	0-5A	0-4A	0-5A	
Display(显示位数)		2 sets, 3 digit LED for voltage and current(4 digit LED for voltage above 100V) (2组显示, 3位LED用于电压和电流(4位LED用于电压高于100V))										
Display Error(显示差异)		≤ 0.5%+1 digit										
Efficiency(效能)		>98%										
Voltage Regulation(电压调节)												
Load Regulation 10-100%(负载调节)		50mV										
Ripple & Noise(P-P)(波纹及噪音)		30mV-50mV										
Current Regulation(电流调节)												
Load Regulation(负载调节)		20mA										
Ripple & Noise(P-P)(波纹及噪音)		20mA										
Others(其他)												
working environment(工作环境)		0-40°C; <90%RH										
storage temperature(存储温度)		20-80°C; <80%RH										

SPECIFICATIONS	MODEL	3010D	3020D
Line Voltage(输入电压)		110V/220VAC,60Hz/50Hz(state before order)	
Output Voltage(输出电压)		0-30V	
Output Current(输出电流)		0-10A	0-20A
Source effect(源效应)		1 x 10 ⁻⁴ +3mV	
Load effect(负载效应)		1 x 10 ⁻⁴ +3mV	
Display Error(显示误差)		≤ 0.5%+1 digit	
Ripple & Noise(P-P)(波纹及噪音)		≤ 1mV	
Dimension(尺寸)		332 x 200 x 130 mm	
Weight(重量)		Appro 8kg	

3203D/3205D DC SWITCHING POWER SUPPLY

可编程直流电源

特点

- 精度高, 稳定性高
- ON/OFF输出开关, 固定5V输出。
- 全功能输出保护功能
- 满负载连续输出
- 电压/电流在标称值内连续可调
- CC/CV自动切换
- 带5组存储设定

FEATURES

- High accuracy, high stability
- Overall output protection
- Voltage and current continuously variable within nominal value
- CC/CV auto switching



32V/3A/5A
PROGRAMMABLE DC POWER SUPPLY

- ON/OFF output switch, fixed 5V output.
- Allow full scale long time operation
- 5 sets of storage settings

SPECIFICATIONS	MODEL	3203D	3205D
Output Voltage(输出电压)		0-32V	0-32V
Output Current(输出电流)		0-3A	0-5A
Source effect(源效应)		CV \leq 0.01%+3mV(mA)	
Load regulation(负载调节)		CV \leq 0.01%+3mV(1 \leq 3A); CC \leq 0.2%+3mA(1 \leq 3A); CV \leq 0.02%+3mV(1 \leq 3A); CC \leq 0.2%+3mA(1 \leq 3A)	
Ripple & Noise(波纹与噪音)		CV \leq 1.0mVrms(1 \leq 3A); CC \leq 3mArms(1 \leq 3A); CV \leq 2.0mVrms(1 \leq 3A); CC \leq 6mArms(1 \leq 3A)	
Protection type(保护类型)		Overcurrent protection (OCP), Overvoltage protection (OVP); 过流保护(OCP); 过压保护(OVP)	
Show the accuracy(显示精度)		Precision voltage directive, \pm (0.5%+2 digits) Accuracy of current instructions, \pm (1%+2 digits) 电压精度 \pm (0.5%+2位); 电流精度 \pm (1%+2位)	
Output voltage rise time(输出电压上升时间)		<60ms	
Output voltage fall time(输出电压下降时间)		<100ms	
Working Voltage(工作电压)		AC 110V/220V/230V \pm 10%, 50Hz/60Hz	
Operating environment(操作环境)		0-40°C; \leq 80%RH	
Dimensions(外形尺寸)		310 X 150 X 205 mm	
Gross Weight(总重量)		Appro 6kg	

30V/3A
AC POWER SUPPLY



MCH-303AD AC LINEAR POWER SUPPLY

交流线性电源

特点

- 高稳定度的数显交流线性电源
- 全功能输出保护功能
- 可满负载连续输出
- 电流/电压在标称值内连续可调
- 电压电流预置输出
- CC/CV自动切换

FEATURES

- High stability
- Allow full scale long time operation
- Voltage and current continuously variable within nominal value.
- CC/CV auto switching

- Overall output protection
- Voltage and current output preset

SPECIFICATIONS	MODEL	303AD
Output Voltage(输出电压)		30V
Output Current(输出电流)		3A
Stability of Power Supply(电源稳定度)		\leq 0.01%+2mV
Load Stability(负载稳定度)		\leq 0.01%+2mV
Continuous Current Regulation(连续电流调节)		3A
Load Change Stability(负载变化稳定度)		\leq 0.01%+2mV
Ripple & Noise(纹波及噪声)		\leq 2mV(有效值)
Dimension(尺寸)		120 x 160 x 270 mm
Weight(重量)		Appro 6kg

302DA/302DB 303DA/303DB 305DA/305DB HIGH-PRECISION SUPPLY

高精度直流线性电源

特点

- 高精度, 高稳定度
- 具有输出ON/OFF的外电路保护功能
- 带固定5V/1A输出功能(只限"DB"型号)
- 全功能输出保护功能
- 可满负载连续输出
- 电流/电压在标称值内连续可调
- CC/CV自动切换

FEATURES

- High accuracy, high stability.
- Extra fixed 5V/1A output.(only for "DB" model).
- Allow full scale long time operation.
- Voltage and current continuously variable within nominal value.



- ON/OFF output switch.
- Overall output protection.
- CC/CV auto switching.

SPECIFICATIONS	MODEL	302DA	302DB	303DA	303DB	305DA	305DB
Output Voltage(输出电压)		30V	30V/5V	30V	30V/5A	30V	30V/5A
Output Current(输出电流)		2A	2A/1A	3A	3A/1A	5A	5A/1A
C.V. Characteristic(恒压特性)							
Source Regulation(源效应)		5 x 10 ⁻⁵ +2mV				1 x 10 ⁻⁴ +2mV	
Load Regulation(负载效应)		5 x 10 ⁻⁵ +2mV				1 x 10 ⁻⁴ +2mV	
Ripple & Noise(纹波)		0.5mV(rms)				0.5mV(rms)	
Temperature Coefficient(温度系数)		150PPM/°C					
C.C Characteristic(恒流特性)							
Source Regulation(源效应)		2 x 10 ⁻⁴ +2mA					
Load Regulation(负载效应)		5mA					
Temperature Coefficient(温度系数)		500PPM/°C					
Display(显示)							
Digital Display(数字显示)		4 digit display±0.1%+1d(only for "DB" models)(4位数显示≤±0.1 + 1d)(仅适用于"DB"型号) 3 digit display±0.4%+1d(only for "DA" models)(3位数显示≤±0.4 + 1d)(仅适用于"DA"型号)					
Resolution(分辨率)							
4 Digits Voltage Display(电压4位显示)		10mV					
3 Digits Voltage Display(电压3位显示)		100mV					
3 Digits Current Display(电流3位显示)		10mA					
Recovery Time(恢复时间)		≤100ms					
Others(其他)							
Dimension(尺寸)		120x155x275 mm	120x155x255 mm	120x155x275 mm	120x155x255 mm	120x155x275 mm	120x155x255 mm
Weight(重量)		Appro 3.6kg		Appro 5.4kg		Appro 7.0kg	



MCH-127D-II POWER SUPPLY BY CONTINUED ADJUSTABLE

交直流稳压电源

FEATURES

- High stability
- Overall output protection
- Allow full scale long time operation
- Voltage and current continuously variable within nominal value
- Voltage and current output preset

SPECIFICATIONS	MODEL	127D	127D-II
Input Voltage(输入电压)		220V±10%, 50/60Hz	
Variable output(可变输出)		1.5V-3V-6V-9V-12V	3V/6V/9V/12V/15V/18V
AC Voltage(交流电压)		1.5V-3V-6V-9V-12V	
AC Current(交流电流)		Depending on the load (Note:the maximum output current of the power supply is 7A) (取决于负载, 电源的最大输出电流为7A)	3A
Source Regulation(源效应)		≤12%	
Load Regulation(负载效应)		≤13.5%	
DC Voltage(直流电压)		1.5V-3V-6V-9V-12V,by step	0-30V,continud adjustable
DC Current(直流电流)		Depending on the load(Note:the maximum output current of the power supply is 7A,it is 4A when setting at 1.5V)(取决于负载, 注意: 电源的最大输出电流为7A, 设置为1.5V时为4A)	3A
Source Regulation(源效应)		≤1%	
Load Regulation(负载效应)		≤2.5%	
Ripple & Noise(P-P)(波纹及噪音)		≤100mV	
Dimension(尺寸)		120 x 150 x 270 mm	
Weight(重量)		Appro 4kg	

MCH-127D

AC & DC LINEAR POWER SUPPLY-BY STEP

交直流稳压电源

特点

- 稳定性高
- 全功能输出保护功能
- 可满负载连续输出
- 电压/电流在标称值内连续可调
- 电压电流预置输出



MCH-S203D

2 IN 1 DC POWER SUPPLY

带万用表手机维修电源

特点

- 高精度的维修检测电源
- 全功能输出保护功能
- 二三极管通断测试
- Rf射频信号接收指示
- 安培/毫安输出切换
- 短路截止/蜂鸣报警
- 功能选择切换按钮
- 带万用表功能



FEATURES

- High Precision Maintenance and Detection Power Supply
- On-off test of bipolar transistor
- Ampere/milliampere output switching
- Function Selection Switch Button
- 2 in 1 punction with digit multimeter
- Full-function output protection function
- RF Radio Frequency Signal Receiving Instruction
- Short-circuit cut-off/buzzing alarm

SPECIFICATIONS	MODEL	S203D
Line Voltage(输入电压)		110V/220VAC, 60Hz/50Hz(state before order)
Voltage Display(电压显示)		Four-digit tube: 00.00; resolution: 00.01V(四位数码管:00.00;分辨率:00.01V)
Current Display(电流显示)		Three Digit Tubes: 0.00; Resolution: 0.01A; Switchable to Display: 000; Resolution: 001mA (三位数码管:0.00;分辨率:0.01A;可切换到显示:000;分辨率:001mA)
Voltage Display Error(电压显示误差)		≤±0.5%
Current Display Error(电流显示误差)		In units A < 0.4%; in units mA < 0.3%. (以A为单位 ≤±0.4%; 以mA为单位 ≤±0.3%)
USB Port Output(USB端口输出)		DC Fixed Voltage: 5V; Maximum Output DC Current: 2A(直流固定电压:5V;最大输出直流电流:2A)
Output Power(电源端口输出)		DC voltage adjustable: 0-20V; maximum output DC current: 3A; maximum output power: 60W (直流电压可调:0-20V;最大输出直流电流:3A;最大输出功率:60W)
Load effect(负载效应)		≤3mV rms
Ripple(纹波)		≤0.2%
Load effect(负载效应)		≤0.2%
Temperature(温度系数)		300ppm/°C
DC Voltage Range(直流电压测量)		Max imum DC voltage can only be measured: 30V.(只能测量直流最高电压:30V)
On-Off Detection(通断检测)		Measuring output voltage: 2.2V or so; measuring line shows constant voltage when open circuit; buzzing sound when short circuit.(测量输出电压:2.2V左右;测量线路开路时显示电压不变;短路时蜂鸣发声)
Diode and Triode measurement (二极管与三极管测量)		Measuring output voltage: about 2.2V; When measuring PN section of diode and transistor, red and black meter pen connection or PN section open circuit, display voltage remains unchanged; when display 0.500~0.800 are normal.(测量输出电压:2.2V左右;当测量二极管与三极管的PN节时,红、黑表笔接反或PN节开路,显示电压不变;当显示0.500~0.800均为正常)
RF Radio Frequency Detection(RF射频检测)		When the mobile phone dials and calls, it is close to the receiving point of the radio frequency signal, and the radio frequency signal indicator flashes. (手机在拨打和来电时,靠近射频信号接收点,射频信号指示灯闪烁发光)
Tube Value(保险丝规格)		Φ5X20mm 0.5A/250V
Working Temperature(工作环境)		0~40°C; <80% RH
Storage Condition(存储环境)		-10~70°C; <80%RH
Dimension(尺寸)		223 x 160 x 70 mm
Weight(重量)		Appro 3kg
Accessory(配件)		One power cord; One set of watch pens; User's manual.(电源线1根;表笔1套;用户手册)

20V/2A TATTOOING TRADE POWER SUPPLY



MCH-K202D

TATTOOING TRADE POWER SUPPLY

纹身电源

特点

- 稳定性高
- 全功能输出保护功能
- 可满负载连续输出
- 电压/电流在标称值内连续可调

MCH-K202W

TATTOOING TRADE POWER SUPPLY

迷你纹身电源

FEATURES

- High stability.
- Overall output protection.
- Allow full scale long time operation.
- Voltage and current continuously variable within nominal value.

18V/1.8A SUPERME MINI TATTOO POWER SUPPLY



SPECIFICATIONS	MODEL	K202D	K202W
Line Voltage(输入电压)		110V/220VAC, 60Hz/50Hz(state before order)	
Output Voltage(输出电压)		0-20V	0-18A
Output Current(输出电流)		0-2A	0-1.8A
Display Error(显示误差)		≤ ±0.5%	≤ ±0.5%+1
Voltage load regulation(10-100%) (电压负载调节)		50mV	
Current load adjustment(10-100%) (电流负载调节)		20mA	
Line voltage a djustment(200-240VAC) (线电压调整)		20mA	
Ripple & Noise(P-P)(波纹及噪音)		20mA	
Dimension(尺寸)		70 x 160 x 220 mm	38 x 75 x 90 mm
Weight(重量)		Appro 2kg	Appro 200g

K305DN/K3010DN K605DN

DC FINE-TUNE CONTROL POWER SUPPLY

可微调稳压直流电源

特点

- 高精度的可调直流电源
- 全功能输出保护功能
- 可满负载连续输出
- 电流/电压在标称值内连续可调
- 电压电流预置输出
- 4位数字显示
- 具有微调控制功能



FEATURES

- High Precision Adjustable DC Power Supply
- Full load continuous output
- Electric Current / voltage can be continuously adjusted within nominal values
- Voltage and Current Preset Output
- WITH fine-tune control
- Full-function output protection function
- 4 digit display

SPECIFICATIONS	MODEL	K305DN	K3010DN	K605DN
Line Voltage(输入电压)		110V/220VAC,60Hz/50Hz(state before order)		
Output Voltage Range(输出电压)		30V	30V	60V
Output Current Range(输出电流)		5A	10A	5A
Voltage Display Accuracy(电压显示精度)		0.01V	0.01V	0.01V
Current Display Accuracy(电流显示精度)		0.010A	0.01A	0.010A
Effectiveness(有效差)		±0.5%		
Source effect(源效应)		≤0.5%		
Load effect(负载效应)		≤0.3%		
Ripple and noise(纹波及噪声)		≤50mV rms		
Temperature Coefficient(温度系数)		300ppm/°C		
Operating environment(操作温度)		-10°C to +60°C/ 30%RH to 90% RH		
Dimension(尺寸)		70(W) x 160(H) x 220(D) mm		
Weight(重量)		Appro 2kg		



K302D/K303D K305D/K3010D K3205D

DC POWER SUPPLY

可调稳压直流电源

特点

- 高精度的可调直流电源
- 全功能输出保护功能
- 可满负载连续输出
- 电流/电压在标称值内连续可调
- 电压电流预置输出
- 温控风扇

FEATURES

- High Precision Adjustable DC Power Supply
- Full load continuous output
- Electric Current / voltage can be adjusted within nominal values
- Voltage and Current Preset Output
- Full-function output protection function
- Temperature controlled fan

SPECIFICATIONS	MODEL	K302D	K303D	K305D	K3010D	K3205D
Line Voltage(输入电压)		105-130VAC,50Hz-60Hz,200-240VAC,50Hz-60Hz				
Input Current (full load)输入电流	100V	0.8A	1.2A	1.5A	3.0A	3.0A
	220V	0.4A	0.6A	0.9A	1.5A	1.5A
Output Voltage Range(输出电压)		30V	30V	30V	30V	32V
Output Current Range(输出电流)		2A	3A	5A	10A	5A
Voltage Display Accuracy(电压显示精度)		±0.5%				
Current Display Accuracy(电流显示精度)		±0.5%				
Efficiency		>98%				
Voltage Regulation(电压调节)						
Load Regulation(10-100%)(负载调节)		50mV				
Line Regulation(200-240VAC)(线性调节)		20mV				
Ripple & Noise(P-P)(波纹与噪音)		30mV	50mV	50mV	50mV	50mV
Current Regulation(电流调节)						
Load Regulation(10-100%)(负载调节)		20mA				
Line Regulation(200-240VAC)(线性调节)		20mA				
Ripple & Noise(P-P)(波纹与噪音)		20mA				
Others(其他)						
Operating Condition(操作环境)		-10°C to +60°C/ 30%RH to 90% RH				
Dimension(尺寸)		70(W) x 160(H) x 220(D) mm				
Weight(重量)		Appro 2kg				

DOM801B

DC IOW-OHM METER

直流低欧姆表

特点

- 自动量程
- 4端测量
- 百分比误差三级分选
- 单测/循测
- 双显示

FEATURES

- Auto range
- Single/Repeating measuring
- Four-terminal measuring
- Percentage error three steps selectable
- Dual display



MODEL	20mΩ	200mΩ	2Ω	20Ω	200Ω	2kΩ	20kΩ	200kΩ
DOM801		+(0.2%+2 digit)LCD Display sampling rate 8times/s (LCD显示, 测试速度:8次/秒)						
DOM801A	+(0.1%+2 digit)	+(0.05%+2 digit)LCD Display sampling rate 8times/s (LCD显示, 测试速度:8次/秒)						
DOM801B		+(0.5%+2 digit) LED Display sampling rate 17times/s (LED显示, 测试速度:17次/秒)						
DOM801C		+(0.2%+2 digit)LED Display (LED显示)						
Output Current(输出电流)	1A	100mA	10mA	1mA	100mA			10mA
Resolution(分辨率)	1mΩ	10mΩ	0.1mΩ	1mΩ	10mΩ	100mΩ		1Ω
Open Circnit Voltage(开路电压)	<1.0V							
Function(功能)	I/O Terminal ,Printing(输入输出接口、打印功能)(DOM801A)							

HC-F1000C/L

FREQUENCY COUNTER

数显频率计

特点

- HC-F1000C: 1Hz~1000MHz, 最大可测1.3-1.5GHz
- 可测周期、计频、计数及自检
- 稳定度为±3x10-9/秒
- 100KHz以下设有低通滤波器以改善低频特性, 增强抗干扰能力
- 闸门时间:0.01s,0.1s,1s
- 最高灵敏度: 优于25mVrms
- 8位数LED显示
- 输入AC电压220V(110V可选)

FEATURES

- HC-F1000C: 10Hz-1000MHz, max to 1.3-1.5GHz
- Period, totalize measurement, self test
- High sensitivity: 85dBV(25mVrms)
- Stability: ±3x10-9/s
- 8 digit LED display
- Gate Time: 0.01s, 0.1s, 1s
- Power supply: AC 220V(110V optional)



3.7GHz

RF FREQUENCY COUNTER



FC-3000

FREQUENCY COUNTER

数显高频频率计

特点

- 频率测量范围:A输入:0.1H-100MHz
- C输入:80MHz-3.7GHz
- A输入具有周期、总计和转速测量功能
- 9位LED显示,0.01mHz分辨率/秒(外部参考信号)
- 自检功能
- 内置低通滤波器
- AC/DC 耦合功能可选
- 10:1输入衰减
- 数据保存功能

FEATURES

- Frequency measuring range:0.1Hz to 100MHz in A input,80Mhz to 3.7GHz in C input.
- Period,total and RPM measurement for ninput A.
- 9 digit display with 0.01mHz resolution in 1Sec (by reference signal).
- Self check function executed to perform a automatic self diagnosis of various counter funter function.
- Low-pass filter installed for removing noise signal in low frequency measuring
- AC/DC coupling function
- Data hold function
- 10:1 input attenuation

SPECIFICATIONS	MODEL	FC-3000
Display(显示)	9digit large LED display, over ow, gate time, mHz, Hz, kHz, MHz, nS, uS, mS,S, HOLD.	
measurement(频率测量)		
Range(量程)	0.1Hz to 100MHz (A input), 80MHz to 3.7GHz (C input).	
Gate time(闸门时间)	0.01Sec, 0.1Sec, 1Sec, 10Sec.	
Resolution(分辨率)	1nHz to 10Hz.	
Accuracy(精度)	±Resolution ±Time base Error ±Count.	
Input characteristics(输入特性)		
Terminal(输入端)	A,C	
Sensitivity(灵敏度)	A input:20mVrms, C input: 30mVrms.	
Impedance(阻抗)	A input: 1Mohm, Less than 40pF, C input : 50ohm.	
Max. input voltage(最大输入电压)	A input :250Vrms, C input: 3Vrms.	
Attenuator(衰减)	A input: x1,x10	
Low pass lter(低通滤波器)	A input: 100kHz, -3dB.	
Multi function for input A(A 输入端功能)		
Period(周期)	Rang :10mSec to 10 Sec. Resolution:1pSec to 1nSec depending on gate time and input signal. Accuracy: ±Resolution ±trigger error ±1Count.	
Totalize(总计)	Range : 5Hz to 10MHz, Count capacity: 1 to 999999999 (Max.)	
RPM(转速)	6 RPM t 900 X106RPM.	
Time base characteristics(时基特性)		
Internal time base(内部时基)	Frequency :100MHz TCO(TCXO; option). Aging rate: less than X5 10-6/month. Temp. stability: less than 5x10-6 (0°C to +50°C) Line voltage: less than 1x10-6 for 10% variation.	
Frequency standard output(标准频率输出)	Frequency :10MHz, Amplitude :1.5Vp-p, Impedance: approx. 600ohm.	
External standard output(标注外部输出)	Frequency :10MHz, Amplitude :1.5Vrms to 5Vrms, Impedance: approx. 600ohm.	
Others(其他)		
Power requirement(电源)	110/220VAC ±10%, 50/60Hz.	
Operating temperature(工作温度)	0-50°C (accuracy speci ed at 25±5°C)	
Dimension(尺寸)	390 x 260 x 90 mm	

MAD-201C

DISTORTION METER

自动失真仪

特点

- 自动换挡及失真度测量功能
- 自动或保留选择功能
- 失真测试范围:从0.1%~100% 7档
- 频率范围:从20Hz-20kHz 3档连续可调
- 固定频率:400Hz,1kHz,10kHz 3点
- AC电压测量范围:1mV-300Vrms 12档
- 更为广泛快速对被测信号的失真度进行测量,也是单针自动量程毫伏表的组合仪器
- 有X轴和Y轴输出端,便于测量李沙育图形



FEATURES

- Auto range and distortion measurement
- 7 distortion ranges:0.1%~100%
- Frequency:20Hz~20kHz continuously adjustable in 3 ranges
- 3 spot frequency:400Hz, 1kHz,10kHz
- Device of distortion measurement and combination of two single channel millivoltmeter
- X axle and Y axle output enable observation of Lissajou's figure
- Auto or hold function selectable
- 12 AC voltage ranges:1mVrms~300Vrms

SPECIFICATIONS	MODEL	MAD-201C
Distortion Measuring(失真度测量)		
Measuring Range(测量范围)		0.1%~100% in 7steps,error ≤3%(full scale)(0.1%~100%分7个档,误差≤3%满刻度)
Fundamental Wave Range(基波频率范围)		20Hz,20KHz,three frequency point 400Hz,1KHz,10KHz (20Hz~20kHz,三个点频率400Hz,1kHz,10kHz)
Input Level(输入电平)		100mVrms-300Vrms
Fundamental Wave Suppression(基波抑制比)		>80dB
Survival Distortion(残余失真度)		<0.03%(including noise) (<0.03%(包括噓叫声和噪音)
AC Voltage Measuring(交流电压测量)		
Measuring Range(测量范围)		1mVrms-300Vrms full scale(1mVrms-300Vrms 满刻度)
Decibel Scale(分贝刻度)		-60dB~+50dBm steps with 10dB(-60dB~+50dB按10dB递增) -20dB~+1dBm(0dB=1V), -20dB~+3.2dBm(0dB=1mW 600Ω)
Frequency Response(频率响应)		100mV-300V range 20Hz-200KHz, ±0.5dB(100mv~300V范围 20Hz~200kHz,为±0.5dB) 1mV-30mV range 20Hz-200KHz, ±1dB(1mv~30mV范围 20Hz~200kHz,为±1dB)
Survival Noise(残余噪声)		≤10mV(input end grounded)(输入端对地短路时10mV)
Input Resistance(输入电阻)		100KW ± 10%
Output(输出端)		"X"axis output:Approx. 1Vrms full scale of voltage("X"轴输出:约1Vrms电压表满刻度时) "Y"axis output:Approx. 500Vrms full scale of distortion("Y"轴输出:约500mVrms失真表满刻度时) Output resistance:approx. 600Ω(输出电阻:约600Ω)
Max. Input Voltage(最大输入电压)		<400V(DC+ACpeck)
Power Supply(电源)		220V/110V ±10%;50Hz/60Hz
Dimension(尺寸)		310 x 230 x 90 mm
Weight(重量)		5.5Kg

100%-0.005%
AUTOMATIC DIGITAL LOW-DISTORTION METER



FEATURES

- Fully automatic distortion test, LCD digital display
- Wide frequency range test 10Hz-150kHz (imbalance), 10Hz-100kHz (balance).
- Test function: distortion, S/N ratio, SINAD ratio, voltage(.rms), frequency.
- Distortion test range:100%-0.005%

MAD-201D

DISTORTION METER

全自动数字低失真度测试仪

特点

- 全自动失真测试,数字LCD显示
- 失真测试范围:100%-0.005%
- 宽频率测试10Hz-150kHz(不平衡), 10Hz-100kHz(平衡)
- 测试功能:失真测试,信噪比率测试,信纳比率测试,电压测试,频率测试。

SPECIFICATIONS	MODEL	MAD-201D
Display mode(显示屏)		LCD digital(液晶)
Input impedance(输入阻抗)		100kΩ/100pF
Additional wave filter(附加波形过滤器)		400Hz, 30kHz, 80kHz
Distortion test(失真测试)		
Input signal range(输入信号范围)		50mV-300V
Distortion test range(失真测试范围)		100%-0.005%
Frequency range(频率范围)	Imbalance(不平衡)	10Hz-150kHz
	Balance(平衡)	10Hz-100kHz
Precision(精度)		20Hz-20kHz:±0.5dB 20kHz-110kHz:±1dB Distortion not higher than 0.03%:±/-2dB(失真不大于0.03%时:±/-2dB)
Voltage test(电压测试)		
Voltage test range(电压测试频率)		300μV-300V
Frequency range(频率范围)	Imbalance(不平衡)	Imbalance (不平衡)10Hz-550kHz
	Balance(平衡)	Balance (平衡)10Hz-120kHz
S/N ratio test(信噪比率测量)		
S/N test range(信噪测量范围)		0-99.99dB
Frequency range(频率范围)		10Hz-550kHz
SINAD test(信纳测量)		
SINAD test range(信纳测量范围)		0db-80dB
Frequency range(频率范围)	Imbalance(不平衡)	Imbalance (不平衡)10Hz-150kHz
	Balance(平衡)	Balance (平衡)10Hz-100kHz

BT-3C

FREQUENCY SIGNAL CHARACTERISTIC SWEEP ANALYZER

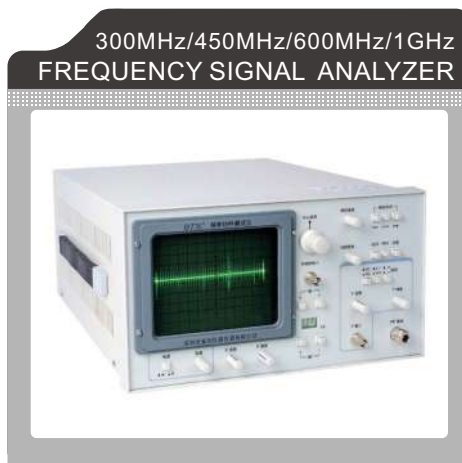
频率特性扫频仪

特点

- 测量频率1~300MHz,450MHz,600MHz,1GHz可选
- 扫频方式:全扫、窄扫、点频三种方式
- 频率标志:50MHz,10MHz,1MHz及外频标
- 扫频输出:0.5Vrms (75W); 不平坦度≤0.5dB
- 输出衰减:10dB X 7和1dB X10步进电控, 数字显示
- 输入AC电压:220V(110V可选)

FEATURES

- Frequency available for the:1-300MHz/450MHz/600MHz/1GHz
- Frequency sweep mode: full sweep, narrow sweep, spot frequency
- Output level: 500mV±10% at 0dB (loaded 75W)
- Line power: AC 220V(110V optional)
- Output impedance: 75Ω selectable



MCH-2672A

MCH-2672B

WITHSTAND VOLTAGE HI-POT TESTER

耐压测试仪

特点

- 高电压,小电流,高精度
- 漏电流、测试时间、连续任意设定
- 同时显示时间、电压、电流值
- 高压击穿保护
- 超限声光报警

FEATURES

- High voltage, small current provides high accuracy
- Leakage Current and Test Time continuously adjustable
- Display Time, Voltage and Current simultaneously
- High voltage breakdown protection
- Over limit sound-light alarm

SPECIFICATIONS	MODEL	BT-3C
Frequency Range(频率范围)		Full sweep: 1-300MHz Narrow sweep: Central frequency 1-300MHz Spot frequency: 1-300MHz variable
Output Voltage(输出电压)		0.5Vrms/75Ω
Output Flatness(输出平坦度)		Better than ±0.15dB
Output Attenuator(输出衰减)		10dB in 7 steps and 1dB in 10 steps
Marker Display(标记显示)		50MHz, 10MHz, 1MHz and external frequency
Vertical deflection Factor(垂直偏转因数)		Better than 2mVp-p/div
Display(显示器)		CRT
Dimension(尺寸)		340 X 190 X 320 mm
Weight(重量)		8kg

SPECIFICATIONS	MODEL	2672A	2672B
Output Voltage(输出电压)		AC/DC:0-5KV	AC/DC:0-10KV
Cutoff Current(漏电流)		AC:0-2/20mA DC:0-2/10mA	
Output Power(输出功率)		100VA	
Output Waveform(输出波形)		50Hz sine wave of line power.	
Test time(定时范围)		1-99 sec. ±5%;Manual; Remote Control	
Voltage Accuracy(电压精度)		±5% of displayed value	
Current Accuracy(电流精度)		±5% of displayed value	
Power Supply(输入电源)		220V(110V Optional) AC±10% 50Hz±2Hz	
Transformer Capacity(变压器容量)		500VA	750VA
Dimension(尺寸)		320 X 260 X 180 mm	
Weight(重量)		7kg	13kg

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YBD-868

IC TESTER

数字集成IC测试仪

特点

- 自检功能
- 器件型号判别
- 可测量超过2000种器件
- 可测试54/74系列 TTL
- 可测试4000和4500系列 CMOS
- 最大可测40脚的IC

FEATURES

- Self-Diagnosis
- Measures more than 2000 kinds of devices
- Tests 4000 and 4500 series CMOS



- Identifies unknown model no. of devices
- Tests 54/74 series TTL
- 40 pin capability

SPECIFICATIONS	MODEL	YBD-868
Controls(控制键)		16 key tact-switch keypad with dual-tone sound indication.(16键轻触开关键盘,带双音声音指示。)
Display(显示屏)		6 digit LED display(6位LED显示屏)
Test Socket(测试插座)		40 pin ZIF socket(40针ZIF插座)
Library ICs(IC资料库)		1.TTL54 Series
Over 2000 devices(超过2000种)		2.TTL55 Series
		3.TTL74 Series
		4.TTL75 Series
		5.CMOS14 Series
		6.CMOS40 Series
		7.CMOS45 Series
		8.Optical Coupler Series(光耦合器系列)
		9.LED Display Series
		10.RAM Series
		11.SCM Series
		12.CPU Peripheral Series
	Power Consumption(功耗)	
Power Supply(电源)		220V±10%, 50Hz
Dimension(尺寸)		292 X 235 X 75mm
Weight(重量)		2kg

1.5KG/3KG/6KG/15KG/30KG MCS PRICE COMPUTING SCALE



FEATURES

- Rechargeable accumulator inside, you can use the scale during recharging.
- Auto zero-setting when switching on.
- 1~30 times of accumulating.
- Power supply: AC 220V (±10%) / 50 Hz, AC 110V/60HZ, DC 6V / 4Ah (Built-in rechargeable battery).
- Working temperature range: 0°C - +40°C

MCS

PRICE COMPUTING SCALE

MCS计数秤

特点

- 内置可充电蓄电池, 充电时可以开机使用
- 开机自动置零。
- 零点自动跟踪。
- 累计次数1~30次
- 电源: 交流220V(±10%)/50Hz, 交流110V/ 60Hz 直流6V/4Ah (内置可充电蓄电池)
- 工作温度范围: 0°C - +40°C
- 相对湿度: ≤ 85%RH

- Auto zero tracking.
- Relative humidity: ≤ 85%RH

MODEL 型号	CAP.(kg) 额定称量(kg)	GRADUATION(d) 分度数(d)	DIVISION(g) 最小秤重(g)	ACCURACY 精确度(g)
MCS-3A	1.5	3000	0.5	0.1
MCS-3A	3	3000	1	0.2
MCS-6A	6	3000	2	0.5
MCS-15A	15	3000	5	1
MCS-30A	30	3000	10	2

SM-936B SM-936D

REWORK STATION

防静电焊台

特点

- 功率:220V-60W
- 温度:200°C-480°C
- 发热体:陶瓷发热体
- 特点:防静电设计、快速升温、安全可靠
- 配件:原厂铝合金、塑料烙铁架

FEATURES

- Power consumption:220V-60W
- Heating element: Ceramic heating element
- Feature: Antistatic design, Fast heating up, safe and reliable.
- Accessory: Aluminum alloy of original, make and iron bracket.



- Temperature: 200°C~480°C

HIGH QUALITY SOLDERING TOOLS MAINTENANCE CENTER



FEATURES

- Power consumption: 220V-70W
- Heating element: Ceramic heating element
- Feature: Antistatic design, Fast heating up, safe and reliable.
- Accessory: Aluminum alloy of original, make and iron bracket.

SM-943 SM-943B

HOT AIR STATION

防静电焊台

特点

- 功率消耗: 220V-70W
- 温度: 200°C-450°C
- 数字显示、自动休眠
- 发热体: 陶瓷发热体
- 特点: 防静电设计、快速升温、安全可靠
- 配件: 原厂铝合金、塑料烙铁架

- Temperature: 200°C~450°C
- Digital Display, Auto sleep

SPECIFICATIONS	MODEL	936B	936D
Voltage(电压)		110V-220V	110V-220V
Frequency(频率)		60 Hz	60 Hz
Power Consumption(功耗)		60 W	64 W
Temperature(温度)		200-480°C	200-480°C
Temperature - rise time(温度上升时间)		<30s	<30s
Temperature Adjustment(温度调节)		Potentiometer(电位器)	Potentiometer(电位器)
Temperature accuracy(温度精度)		±3%	±2%
Temperature stability(温度稳定性)		±2°C	±2°C
Heating Element(加热元件)		ceramics(陶瓷)	ceramics(陶瓷)
Certificates(证书)		CE certificates	CE certificates
With Display(显示)		-	LED
Anti Static (ESD Safe)(防静电)		ESD	ESD
Temperature locking(温度锁定)		-	YES
Tip-to-ground impedance(对地阻抗)		2Ω	2Ω
Tip-to-ground voltage(对地电压)		<2mV	<2mV
Auto sleep(自动睡眠)		-	YES
Accessories(配件)		Iron, Sponge, Fame(铁,海绵,烙铁架)	Iron, Sponge, Fame(铁,海绵,烙铁架)
Dimension(尺寸)		23 x 19 x 14 mm	23 x 19 x 14 mm
Weight(重量)		1.4Kg	1.5Kg

SPECIFICATIONS	MODEL	943	943B
Voltage(电压)		110V-220V	110V-220V
Frequency(频率)		60 Hz	60 Hz
Power Consumption(功耗)		70 W	70 W
Temperature(温度)		200-450°C	200-450°C
Temperature - rise time(温度上升时间)		<30s	<30s
Temperature Adjustment(温度调节)		Potentiometer(电位器)	Potentiometer(电位器)
Temperature accuracy(温度精度)		±1%	±1%
Temperature stability(温度稳定性)		±2°C	±2°C
Heating Element(加热元件)		ceramics(陶瓷)	ceramics(陶瓷)
Certificates(证书)		CE certificates	CE certificates
With Display(显示)		LED	LED
Anti Static (ESD Safe)(防静电)		ESD	ESD
Temperature locking(温度锁定)		LED	YES
Tip-to-ground impedance(对地阻抗)		2Ω	2Ω
Tip-to-ground voltage(对地电压)		<2mV	<2mV
Auto sleep(自动睡眠)		LED	YES
Accessories(配件)		Iron, Sponge, Fame(铁,海绵,烙铁架)	Iron, Sponge, Fame(铁,海绵,烙铁架)
Dimension(尺寸)		23 x 19 x 14 mm	23 x 19 x 14 mm
Weight(重量)		1.8Kg	1.8Kg

SM-858 SM-858D

HOT AIR STATION

热风枪

特点

- 功率:220V-700W
- 温度:200°C-450°C
- 发热体:陶瓷发热体
- 特点:防静电设计、快速升温、安全可靠
- 无刷电机



FEATURES

- Power consumption:220V-700W
- Heating element: Ceramic heating element
- Feature: Antistatic design, Fast heating up, safe and reliable.

- Temperature: 200°C~450°C
- Brushless motor

SPECIFICATIONS	MODEL	858	858D
Voltage(电压)		110V - 220V	110V - 220V
Frequency(频率)		60 Hz	60 Hz
Power Consumption(功耗)		700W	700W
Temperature(温度)		200° - 450°C	200° - 450°C
Air flow - Rework station(热风枪气流)		>20L/min	>20L/min
Temperature accuracy(温度精度)		±2%	±2%
Temperature stability(温度稳定性)		±2°C	±2°C
Temperature Adjustment(温度调节)		Potentiometer(电位器)	Potentiometer / Control panel(电位器/控制面板)
Temperature lock(温度锁定)		YES	YES
With Display(显示)		-	LED
Pump(泵)		Brushless motor(无刷电机)	Brushless motor(无刷电机)
Heating Element(加热元件)		Ceramic(陶瓷)	Ceramic(陶瓷)
Air flow(空气流动)		120 L/min	120 L/min
Anti Static (ESD Safe)(防静电)		ESD	ESD
Dimension(尺寸)		157 x 185 x 135 mm	260 x 170 x 150 mm
Weight(重量)		2 kg	1.3kg



SM-850

HOT AIR STATION

热风枪

特点

- 功率:220V-250W
- 温度:200°C-480°C
- 发热体:陶瓷发热体
- 特点:防静电设计、快速升温、安全可靠
- 风泵

FEATURES

- Power consumption:220V-250W
- Heating element: Ceramic heating element
- Feature: Antistatic design, Fast heating up, safe and reliable.

- Temperature: 200°C-480°C
- Air pump

SPECIFICATIONS	MODEL	850
Voltage(电压)		110V - 220V
Frequency(频率)		60 Hz
Power Consumption(功耗)		250W
Temperature(温度)		200° - 480°C
Air flow - Rework station(热风枪气流)		>24L/min
Temperature accuracy(温度精度)		±2%
Temperature stability(温度稳定性)		±2°C
Temperature Adjustment(温度调节)		Potentiometer(电位器)
Temperature lock(温度锁定)		YES
With Display(显示)		-
Pump(泵)		Air pump(风泵)
Heating Element(加热元件)		Ceramic(陶瓷)
Air flow(空气流动)		120 L/min
Anti Static (ESD Safe)(防静电)		ESD
Dimension(尺寸)		330 x 270 x 200 mm
Weight(重量)		2.8Kg

SM-898D SM-899D

2 IN 1 STATION MINI SIZE

2合1维修台

特点

- 功率:220V-700W
- 温度:200°C-480°C
- 发热体:陶瓷发热体
- 特点:防静电设计、快速升温、安全可靠
- 无刷电机



HIGH QUALITY SOLDERING TOOLS
ANTISTATIC SOLDERING STATION

FEATURES

- Power consumption:220V-700W
- Heating element: Ceramic heating element
- Feature: Antistatic design, Fast heating up, safe and reliable.
- Temperature: 200°C~450°C
- Brushless motor

SPECIFICATIONS	MODEL	898D	899D
Voltage(电压)		110V - 220V	110V - 220V
Frequency(频率)		60 Hz	60 Hz
With Display (显示)		LED - 2 unit(2个)	LED
Power Consumption- Equipment(设备功耗)		770W	700W
Power Consumption - Soldering station(焊台功耗)		70 W	50 W
Temperature - Soldering station(焊台温度)		200° - 480° C	200°C-480°C
Temperature accuracy - Soldering station(焊台温度精度)		± 3%	± 3%
Temperature stability - Soldering station(焊台温度稳定度)		± 2°C	± 2°C
Temperature Adjustment - Soldering station(焊台温度调节)		Potentiometer/Control panel(电位器/控制面板)	
Heating Element - Soldering station(焊台加热元件)		Ceramic(陶瓷)	Ceramic(陶瓷)
Power Consumption - Rework station(返修台功耗)		700W	650W
Pump - Rework station(返修台-泵)		Brushless motor(无刷电机)	Brushless motor(无刷电机)
Air flow - Rework station(返修台气流)		>20L/min	>20L/min
Temperature - Rework station(返修台温度)		100° ~ 480°	100° ~ 450°
Temperature accuracy - Rework station(返修台温度精度)		± 3%	± 3%
Temperature stability - Rework station(返修台温度稳定度)		± 2°C	± 2°C
Temperature Adjustment - Rework station(返修台温度调节)		Potentiometer/Control panel(电位器/控制面板)	
Auto sleep(自动休眠)		YES	YES
Anti Static (ESD Safe)(防静电)		ESD	ESD
Tip-to-ground impedance(尖端对地阻抗)		<2Ω	<2Ω
Tip-to-ground voltage(尖端对地电压)		<2mV	<2mV
Dimension(尺寸)		260 x 170 x 150 mm	260 x 170 x 150 mm
Weight(重量)		2.2kg	2.1kg

HIGH QUALITY SOLDERING TOOLS
MAINTENANCE CENTER



SM-852 SM-852D

2 IN 1 STATION LARGE SIZE

2合1维修台

特点

- 功率:220V-320W
- 温度:200°C-480°C
- 发热体:陶瓷发热体
- 特点:防静电设计、快速升温、安全可靠
- 风泵

FEATURES

- Power consumption:220V-320W
- Heating element: Ceramic heating element
- Feature: Antistatic design, Fast heating up, safe and reliable.
- Temperature: 200°C-480°C
- Air pump

SPECIFICATIONS	MODEL	852	852D
Voltage(电压)		110V - 220V	110V - 220V
Frequency(频率)		60 Hz	60 Hz
With Display (显示)		-	LED - 2 unit
Power Consumption- Equipment(设备功耗)		320 W	320 W
Power Consumption - Soldering station(焊台功耗)		60 W	60 W
Temperature - Soldering station(焊台温度)		200° - 480° C	200° - 480° C
Temperature accuracy - Soldering station(焊台温度精度)		± 3%	± 3%
Temperature stability - Soldering station(焊台温度稳定度)		± 2°C	± 2°C
Temperature Adjustment - Soldering station(焊台温度调节)		Potentiometer(电位器)	Potentiometer(电位器)
Heating Element - Soldering station(焊台加热元件)		Ceramic(陶瓷)	Ceramic(陶瓷)
Power Consumption - Rework station(返修台功耗)		320W	320W
Pump - Rework station(返修台-泵)		Air pump(风泵)	Air pump(风泵)
Air flow - Rework station(返修台气流)		>24L/min	>24L/min
Temperature - Rework station(返修台温度)			
Temperature accuracy - Rework station(返修台温度精度)		± 3%	± 3%
Temperature stability - Rework station(返修台温度稳定度)		± 2°C	± 2°C
Temperature Adjustment - Rework station(返修台温度调节)		Potentiometer(电位器)	Potentiometer(电位器)
Auto sleep(自动休眠)		YES	YES
Anti Static (ESD Safe)(防静电)		ESD	ESD
Tip-to-ground impedance(尖端对地阻抗)		<2Ω	<2Ω
Tip-to-ground voltage(尖端对地电压)		<2mV	<2mV
Dimension(尺寸)		330 x 270 x 200 mm	330 x 270 x 200 mm
Weight(重量)		4.3kg	4.3kg

MCH INSTRUMENTS CO., LTD.

MCH INSTRUMENTS CO., LTD.

9100A/9100B

DIGITAL AC/DC CLAMP METER

数显交直流钳表



Specifications	Range	Accuracy	
		9100A	9100B
DC Voltage	660mV/6.6V/66V	±(0.8%+3)	
	660V	±(1.0%+5)	
	400mV/4V/40V/400V		±(0.8%+3)
	600V		±(1.0%+5)
AC Voltage	660mV/6.6V/66V/660V	±(1.5%+5)	
	4V/40V/400V/600V		±(1.0%+5)
AC Current	66A/600A		
	40A/400A	±(3.0%+10)	
DC Current	66A/600A		±(3.0%+10)
	40A/400A	±(3.0%+10)	
INRUSH CURRENT(100ms)	66A/600A	±(10.0%+60)	±(3.0%+10)
Resistance	660Ω/6.6kΩ/66kΩ/660kΩ/6.6MΩ	±(1.2%+2)	
	66MΩ	±(2.0%+5)	
	40MΩ		±(0.8%+3) ±(1.2%+3)
Capacitance	6.6μF/66μF/660μF/6.6mF/66mF	±(4.0%+3)	
	400nF/4μF/40μF/400μF/4000μF		±(4.0%+5)
Frequency	10kHz	±(1.5%+5)	
	10Hz~10MHz		±(0.5%+2)
Duty cycle	10%~95%	±(3.0%+2)	±(3.0%+2)
Feature			
Display		6600 Counts	4000 Counts
Auto and manual range		✓	✓
Inrush current		✓	✓
True RMS		✓	✓
Data hold		✓	✓
Work light		✓	✓
Diode test		✓	✓
Max/Min Value hold		✓	✓
Continuity		✓	✓
Back light		✓	✓
General			
Power supply	1.5V(AAA)x3 Batteries		
Weight	Approx 245g		
Size	280mmx78mmx35mm		
Jaw Size	Ø26mm		
Safety Rating	CE CAT.III600V RoHS		



9860A/9860B

DIGITAL AC CLAMP METER

数显交流钳表

Specifications	Range	Accuracy	
		9860B	9860A
DC Voltage	200mV/2V/20V/200V	±(0.8%+2)	
	400mV/4V/40V/400V		±(0.8%+2)
	600V	±(1.0%+2)	±(1.0%+2)
AC Voltage	2V/20V/200V	±(1.0%+5)	
	4V/40V/400V		±(1.0%+10)
AC Current	600V	±(1.2%+5)	±(1.2%+10)
	2A/20A/200A/600A	±(3.0%+10)	±(3.0%+10)
Resistance	200Ω/2kΩ/20kΩ/200kΩ/2MΩ/20 MΩ	±(1.2%+2)	
	400Ω/4kΩ/40kΩ/400kΩ/4MΩ		±(1.2%+2) ±(2.0%+5)
Capacitance	50nF/500nF/5μF/50μF/100μF		±(4.0%+5)
Frequency	50Hz/500Hz/5kHz/50kHz/100kHz		±(1.0%+2)
Duty cycle	1%~99%		±(3.0%+2)
Temperature(°C)	-20°C~750°C		±(2.0%+2)
Feature			
Display		2000 Counts	4000 Counts
Auto and manual range		✓	✓
Data hold		✓	✓
Work light		✓	✓
Diode test		✓	✓
Maximum Value hold		✓	✓
Continuity		✓	✓
Back light		✓	✓
General			
Power supply	1.5V(AAA)x3 Batteries		
Weight	Approx 245g		
Size	280mmx78mmx35mm		
Jaw Size	Ø26mm		
Safety Rating	CE CAT.III600V RoHS		



MCH-9208

DIGITAL TACHOMETER NON-CONTACT

光电(非接触型)数显转速表

Specifications	MCH-9208
Contact Measurement	50 ~ 99999RPM±(0.03%+2)
Measuring Distance	N/A
Auto Power Off	30S
MAX/MIN/AVG Functions	✓
m/min m/sec ft/min ft/Sec in/min unit selection	✓
Data Logging	100 groups
Data Hold	✓
Display Back light	✓
Low Battery indication	✓
General	
Power Supply	4x1.5AAA Batteries
Product Size	193mm x60mm x 29mm (7.5" x 2.4" x 1.1")
Product Weight	120g(0.31b)
Category	CE RoHS



MCH-9208B

DIGITAL TACHOMETER CONTACT

接触式数显转速表

Specifications	MCH-9208B
Non-Contact Measurement	50 ~ 19999RPM±(0.03%+2)
Measuring Distance	50mm ~ 250mm
Auto Power Off	30S
MAX/MIN/AVG Functions	✓
m/min m/sec ft/min ft/Sec in/min unit selection	✓
Data Logging	100 groups
Data Hold	✓
Display Back light	✓
Low Battery indication	✓
General	
Power Supply	4x1.5AAA Batteries
Product Size	193mm x60mm x 29mm (7.5" x 2.4" x 1.1")
Product Weight	120g(0.31b)
Category	CE RoHS



MCH-9208C

TEMPERATURE AND HUMIDITY METER

数显温湿度计

specification	Range	Accuracy	Resolution
Ambient temperature	-20 to 60°C (-4 to 140°F)	±0.5°C (0 to 45°C) ±1.0°C (-20 to 0°C, 45°C to 60°C)	0.1°C/°F
RH	0 to 100%RH	±2.0% RH(10% to 90%) ±3.0% RH(0% to 10%, 90% to 100%)	0.1%
WB	-20 to 60°C (-4 to 140°F)	±0.5°C (0 to 45°C) ±1.0°C (-20 to 0°C, 45°C to 60°C)	0.1°C/°F
DP	-50 to 60°C (-58 to 140°F)	±0.5°C (0 to 45°C) ±1.0°C (-50 to 0°C, 45°C to 60°C)	0.1°C/°F

Features

Data Hold	√
MAX/MIN	√
Data Logging	100 groups
Back light	√
Low battery indication	√

General

Power Supply	4x1.5v AAA Batteries
Product Size	184mm x 60mm x29mm
Product Weight	190g(0.41lb)
Category	CE RoHS



MCH-9208D

DIGITAL SOUND LEVEL METER

数显声音监测仪

Specifications

Sound pressure accuracy	± 1.5 dB (sound pressure standard, 94 dB @ 1KHz).
Sound pressure accuracy	±5 dB (sound pressure standard, 94 dB @ 8KHz)
Sound pressure frequency response	50 dB (for each measurement gear level)
Dynamic range of sound pressure	30-130 dB A, 35-130 dB C.
Sound pressure frequency weighting characteristics	A and C characteristics
Dynamic characteristic of sound pressure	FAST 125ms, SLOW 1sec
Microphone	polarized capacitive microphone

Features

Display	Digital Display & Analog Bars Display
Auto range	√
Reaction rate	Fast/Slow Selection
MAX/MIN/HOLD	√
Back light	√
Low battery indication	√

General

Power Supply	4x1.5v AAA Batteries
Product Size	184mm x 60mm x29mm
Product Weight	190g(0.41lb)
Category	CE RoHS



9233A/9233B/9233C

DIGITAL MULTIMETERS

数显万用表

Specifications	Range	Accuracy		
		9233A	9233B	9233C
DC Voltage	200mV/2V/20V/200V 600V	±(0.5%+2) ±(0.8%+2)	±(0.5%+2) ±(0.8%+2)	±(0.5%+2) ±(0.8%+2)
AC Voltage	200V/600V	±(1.2%+10)	±(1.2%+10)	±(1.2%+10)
DC Current	200µA/2mA/20mA 200mA	±(1.0%+2) ±(1.5%+2)	±(1.0%+2) ±(1.5%+2)	±(1.0%+2) ±(1.5%+2)
Resistance	10A 200Ω/2kΩ/20kΩ/200kΩ/2MΩ 20MΩ	±(3.0%+2) ±(0.8%+2) ±(1.0%+2)	±(3.0%+2) ±(0.8%+2) ±(1.0%+2)	±(3.0%+2) ±(0.8%+2) ±(1.0%+2)
Temperature(°C)	-20°C~1000°C			±(2.0%+3)
Temperature(°F)	-4°F~1832°F			±(2.0%+3)
Feature		9233A	9233B	9233C
Display		2000 Counts	2000 Counts	2000 Counts
Data hold		✓	✓	✓
Back light		✓	✓	✓
Diode test		✓	✓	✓
Continuity		✓	✓	✓
Temperature				✓
General				
Power supply	9V6F22 Battery			
Weight	Approx 110g			
Size	140mm x67mm x30mm			
Safety Rating	CE CAT.III1000V CAT.III600V RoHS			

9233D/9233E

DIGITAL MULTIMETERS

数显万用表

Specifications	Range	Accuracy	
		9233D	9233E (MOQ1000)
DC Voltage	200mV/2V/20V/200V 600V	±(0.5%+2) ±(0.8%+2)	±(0.5%+2) ±(0.8%+2)
AC Voltage	2V/20V/200V/600V	±(1.0%+3)	±(1.0%+3)
DC Current	200µA/2mA/20mA/200mA 10A	±(1.2%+3) ±(3.0%+3)	±(1.2%+3) ±(3.0%+3)
AC Current	10A	±(1.2%+3)	±(1.2%+3)
Resistance	200Ω/2kΩ/20kΩ/200kΩ/2MΩ 20MΩ	±(1.0%+2)	±(1.0%+2)
Frequency	20kHz	±(1.0%+2)	
Temperature(°C)	-20°C~1000°C		±(3.0%+3)
Temperature(°F)	-4°F~1832°F		±(3.0%+3)
Feature		9233D	9233E
Display		2000 Counts	2000 Counts
Auto range		✓	✓
Data hold		✓	✓
Back light		✓	✓
Diode test		✓	✓
Continuity		✓	✓
Maximum Value hold		✓	✓
General			
Power supply	9V6F22 Battery		
Weight	Approx 110g		
Size	140mm x67mm x30mm		
Safety Rating	CE CAT.III1000V CAT.III600V RoHS		

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CE
EMC&LVD

Designed and Conforms to
IEC61010-1
600V
CAT.III



CE
EMC&LVD

Designed and Conforms to
IEC61010-1
600V
CAT.III



9600A/9880A/9600C

DIGITAL MULTIMETERS

数显万用表

Specifications	Range	Accuracy		
		9600A	9880A	9600C (MOQ1000)
DC Voltage	200mV/2V/20V/200V	±(0.5%+2)	±(0.5%+2)	±(0.5%+2)
	1000V	±(0.8%+2)	±(0.8%+2)	±(0.8%+2)
AC Voltage	200mV	±(1.2%+3)	±(1.2%+3)	±(1.2%+3)
	2V/20V/200V	±(0.8%+3)	±(0.8%+3)	±(0.8%+3)
DC Current	750V	±(1.2%+3)	±(1.2%+3)	±(1.2%+3)
	20μA	±(2.0%+5)		
	200μA	±(0.8%+1)		
	2mA/20mA/200mA	±(1.2%+3)	±(1.2%+3)	±(1.2%+3)
AC Current	20A	±(2.0%+5)	±(2.0%+5)	±(2.0%+5)
	20μA	±(2.0%+5)		
Resistance	200μA/2mA/20mA/200mA	±(1.8%+5)	±(1.8%+5)	±(1.8%+5)
	20A	±(3.0%+5)	±(3.0%+5)	±(3.0%+5)
	200Ω/2kΩ/20kΩ/200kΩ/2MΩ	±(0.8%+3)	±(0.8%+3)	±(0.8%+3)
Capacitance	20MΩ	±(1.0%+2)	±(1.0%+2)	±(1.0%+2)
	200MΩ	±(6.0%+10)	±(6.0%+10)	±(6.0%+10)
Temperature(°C)	2nF/20nF/200nF/2μF/20μF	±(4.0%+3)	±(4.0%+3)	±(4.0%+3)
	200μF	±(6.0%+10)	±(6.0%+10)	±(6.0%+10)
Temperature(°C)	-20°C~1000°C		±(2.0%+3)	
Feature		9600A	9880A	9600C
Display		2000 Counts	2000 Counts	2000 Counts
Data hold		✓	✓	✓
Auto power off		✓	✓	✓
Diode test		✓	✓	✓
Transistor		✓	✓	✓
Continuity		✓	✓	✓
General				
Power supply	9V6F22 Battery			
Weight	Approx 380g			
Size	190mmx89mmx50mm			
Safety Rating	CE CAT.II1000V CAT.III600V RoHS			

9600D/9880B/9600F

DIGITAL MULTIMETERS

数显万用表

Specifications	Range	Accuracy		
		9600D (MOQ1000)	9880B	9600F (MOQ1000)
DC Voltage	200mV/2V/20V/200V	±(0.5%+2)	±(0.5%+2)	±(0.1%+3)
	1000V	±(0.8%+2)	±(0.8%+2)	±(0.15%+3)
AC Voltage	2V/20V/200V	±(0.8%+3)	±(0.8%+3)	±(0.8%+10)
	750V	±(1.2%+3)	±(1.2%+3)	±(1.0%+15)
AC Current	2mA/20mA/200mA	±(1.2%+3)	±(1.2%+3)	±(0.8%+5)
	20A	±(2.0%+5)	±(2.0%+5)	±(2.0%+10)
AC Current	2mA/20mA/200mA	±(1.8%+5)	±(1.8%+5)	±(0.8%+10)
	20A	±(3.0%+5)	±(3.0%+5)	±(2.5%+10)
Resistance	200Ω/2kΩ/20kΩ/200kΩ/2MΩ	±(0.8%+3)	±(0.8%+3)	±(0.5%+3)
	20MΩ	±(1.0%+5)	±(1.0%+5)	±(0.5%+3)
Capacitance	200MΩ	±(6.0%+10)	±(6.0%+10)	±(5.0%+10)
	2nF/20nF/200nF/2μF/20μF	±(4.0%+3)	±(4.0%+3)	±(4.0%+20)
Frequency	200μF	±(6.0%+10)	±(6.0%+10)	±(6.0%+20)
	20kHz	±(2.0%+5)	±(2.0%+5)	±(1.5%+5)
Temperature(°C)	2kHz	±(1.5%+5)		
Temperature(°C)	-20°C~1000°C		±(2.0%+3)	
Feature		9600D	9880B	9600F
Display		2000 Counts	2000 Counts	20000 Counts
Data hold		✓	✓	✓
Auto power off		✓	✓	✓
Diode test		✓	✓	✓
Transistor		✓	✓	✓
Continuity		✓	✓	✓
General				
Power supply	9V6F22 Battery			
Weight	Approx 380g			
Size	190mmx89mmx50mm			
Safety Rating	CE CAT.II1000V CAT.III600V RoHS			

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9880E/9880D/9880G

DIGITAL MULTIMETERS

数显万用表

Specifications	Range	Accuracy		
		MCH-9880E	MCH-9880D	MCH-9880G
DC Voltage	200mV/2V/20V/200V	±(0.1%+5)	±(0.5%+1)	±(0.1%+5)
	1000V	±(0.15%+5)	±(0.8%+2)	±(0.15%+5)
AC Voltage	2V/20V/200V	±(0.8%+15)	±(0.8%+3)	±(0.8%+15)
	750V	±(1.0%+15)	±(1.2%+3)	±(1.0%+15)
DC Current	2mA	±(0.5%+10)		±(0.5%+10)
	200mA		±(1.5%+1)	
AC Current	20A	±(2.0%+20)	±(2.0%+5)	±(2.0%+20)
	2mA/200mA	±(1.2%+20)		±(0.8%+20)
Resistance	200Ω/2kΩ/20kΩ/200kΩ/2MΩ/20MΩ	±(2.5%+50)	±(3.0%+7)	±(2.5%+50)
	200MΩ	±(0.8%+5)	±(0.8%+1)	±(0.8%+5)
Capacitance	20nF/200nF/2μF/200μF	±(4.0%+20)		±(4.0%+20)
	20nF/200nF/2μF/200μF		±(4.0%+5)	
Inductance	20mH/200mH/2H/20H		±(3.0%+5)	
Frequency	20kHz	±(1.5%+5)		±(1.5%+5)
Feature				
Display		20000 Counts	2000 Counts	4000 Counts
Data hold		✓	✓	✓
Diode test		✓	✓	✓
Transistor		✓	✓	✓
Continuity		✓	✓	✓
Back light		✓	✓	✓
General				
Power supply	9V6F22 Battery			
Weight	Approx 380g			
Size	188mmx92mmx50mm			
Safety Rating	CE CAT.III1000V CAT.IV600V RoHS			



9840A/9840B/9840C

DIGITAL MULTIMETERS

数显万用表

Specifications	Range	Accuracy		
		9840A	9840B	9840C (MOQ1000)
DC Voltage	200mV/2V/20V/200V	±(0.5%+1)	±(0.5%+1)	±(0.5%+1)
	1000V	±(0.8%+2)	±(0.8%+2)	±(0.8%+2)
AC Voltage	200mV/2V/20V/200V	±(0.8%+3)		
	750V	±(1.2%+3)	±(0.8%+3)	±(0.8%+3)
DC Current	20uA/200uA/2mA/20mA/200mA	±(1.0%+5)		
	2mA/20mA/200mA		±(1.0%+5)	
AC Current	20A	±(2.0%+5)	±(2.0%+5)	±(1.5%+1)
	2mA/20mA/200mA	±(1.0%+5)		±(2.0%+5)
Resistance	200Ω/2kΩ/20kΩ/200kΩ/2MΩ/20MΩ	±(3.0%+7)	±(3.0%+7)	±(1.8%+3)
	200MΩ	±(0.8%+3)	±(0.8%+5)	±(0.8%+5)
Capacitance	2nF/20nF/200nF/2μF/20μF	±(5.0%+10)	±(5.0%+10)	±(5.0%+10)
	20nF/200nF/2μF/20μF		±(4.0%+5)	
Frequency	20kHz		±(5.0%+10)	±(4.0%+5)
Temperature(°C)	-20°C~1000°C			±(1.5%+5)
Feature				
Display		2000 Counts	2000 Counts	2000 Counts
Data hold		✓	✓	✓
Diode test		✓	✓	✓
Transistor		✓	✓	✓
Continuity		✓	✓	✓
Back light		✓	✓	✓
General				
Power supply	9V6F22 Battery			
Weight	Approx 380g			
Size	188mmx92mmx50mm			
Safety Rating	CE CAT.III1000V CAT.IV600V RoHS			



MCH-87A/87B/87C**HANDHELD MULTIMETERS**

数显万用表



Specifications	Range	Accuracy	
		87B	87C
DC Voltage	220V/2V/20V/200V/1000V	±(0.5%+3)	
AC Voltage	220V/2V/20V/200V/750V	±(0.8%+3)	
	2V/20V/200V/750V		±(0.8%+3)
DC Current	2mA/20mA/200mA/20A	±(0.8%+3)	
	20mA/200mA/20A		±(0.8%+3)
AC Current	2mA/20mA/200mA/20A	±(1.0%+3)	
	20mA/200mA/20A		±(1.0%+3)
Resistance	200/2K/20K/200KΩ	±(0.8%+3)	±(0.8%+3)
	2M/20M/200MΩ		
Capacitance	2nF/20nF/200nF/2uF/200uF	±(2.5%+20)	
	2nF/20nF/200nF/2uF		±(2.5%+20)
	20uF/200uF		
Frequency	200kHz		±(1.5%+5)
Temperature	-40°C-1000°C		±(3%+3)
Input impedance		10MΩ	10MΩ
Sampling Audio Sounding		400Hz	400Hz
Feature		87B	87C
Diode test		✓	✓
Audion test		✓	✓
On-off buzzer		✓	✓
Low voltage display		✓	✓
Data hold		✓	✓
Auto power off		✓	✓
Function protection		✓	✓
Maximum display		1999	1999
General			
Power supply	9V Battery (6F22)		
Size	200 X 96 X 57 mm		
Weight	400g		

**MCH-87D/87E****HANDHELD MULTIMETERS**

数显万用表

Specifications	Range	Accuracy	
		87D	87E
DC Voltage	220V/2V/20V/200V/1000V	±(0.8%+3)	±(0.8%+3)
AC Voltage	220V/2V/20V/200V/750V	±(0.8%+3)	±(1.0%+3)
	2V/20V/200V/750V	±(0.8%+3)	
DC Current	2mA/20mA/200mA/20A	±(0.8%+3)	±(0.8%+3)
	20mA/200mA/20A	±(0.8%+3)	
AC Current	2mA/20mA/200mA/20A	±(1.0%+5)	±(1.2%+3)
	20mA/200mA/20A	±(1.0%+5)	
Resistance	200/2K/20K/200KΩ	±(0.5%+3)	±(0.8%+3)
	2M/20M/200MΩ		
Capacitance	2nF/20nF/200nF/2uF/200uF	±(3.0%+3)	±(4.0%+3)
	2nF/20nF/200nF/2uF	±(3.0%+3)	
	20uF/200uF		
Frequency	200kHz	±(2.0%+5)	
Temperature	-40°C-1000°C		
Input impedance		10MΩ	10MΩ
Sampling Audio Sounding		400Hz	400Hz
Feature		87A	87C
Diode test		✓	✓
Audion test		✓	✓
On-off buzzer		✓	✓
Low voltage display		✓	✓
Data hold		✓	✓
Auto power off		✓	✓
Function protection		✓	✓
Maximum display		1999	1999
General			
Power supply	9V Battery (6F22)		
Size	200 X 96 X 57 mm		
Weight	400g		



9800C/9800F DIGITAL MULTIMETERS

数显万用表



Specifications	Range	Accuracy	
		MCH-9880F	MCH-9880C
DC Voltage	400mV/4V/40V/400V	±(0.5%+2)	±(0.5%+3)
	1000V	±(0.8%+2)	±(0.8%+5)
AC Voltage	400mV	±(2.0%+3)	±(1.2%+20)
	4V/40V/400V	±(0.8%+3)	±(0.8%+3)
DC Current	400µA/4000µA/40mA/400mA	±(0.8%+2)	±(1.0%+5)
	20A	±(1.2%+2)	±(1.5%+8)
AC Current	400µA/4000µA/40mA/400mA	±(1.5%+2)	±(1.5%+8)
	20A	±(2.0%+2)	±(2.0%+10)
Resistance	400Ω/4kΩ/40kΩ/400kΩ/4MΩ	±(0.8%+1)	±(1.0%+3)
	40MΩ	±(1.0%+2)	±(1.2%+15)
Capacitance	4nF/40nF/400nF/4µF/40µF/200µF	±(4.0%+5)	
	40nF/400nF/4µF/40µF/400µF/4000µF	±(4.0%+5)	
Frequency	10Hz~10MHz	±(0.5%+2)	±(1.5%+15)
Duty cycle	1%~99%	±(2.0%+2)	±(2.0%+2)
Temperature(°C)	-20°C~1000°C	±(2.0%+2)	
Feature			
Display		MCH-9880F	MCH-9880C
Auto and manual range		4000 Counts	4000 Counts
Relative Measurement		✓	✓
Max/Min Value hold		✓	✓
Data hold		✓	✓
Non-Contact Voltage Detector(NCV)		✓	✓
Diode test		✓	✓
Transistor		✓	✓
Continuity		✓	✓
Back light		✓	✓
General			
Power supply	9V6F22 Battery		
Weight	Approx 380g		
Size	188mmx92mmx50mm		
Safety Rating	CE CAT.III1000V CAT.IV600V RoHS		



9800A/9800B DIGITAL AC CLAMP METER

数显交流钳表

Specifications	Range	Accuracy	
		9800A	9800B
DC Voltage	1000V	±(1.0%+2)	±(1.0%+2)
AC Voltage	750V	±(1.0%+5)	±(1.0%+5)
AC Current	20A/200A	±(2.0%+5)	±(2.0%+5)
	1000A	±(2.0%+7)	±(2.0%+7)
Resistance	200Ω/2000Ω	±(1.0%+3)	±(1.0%+3)
Temperature(°C)	-20°C~750°C	±(1.0%+5)	
Feature			
Display		9800A	9800B
Data hold		✓	✓
Diode		✓	✓
Continuity		✓	✓
Back light		✓	✓
General			
Power supply	9V 6F22 Battery		
Weight	Approx 410g		
Size	250mmx99mmx43mm		
Jaw Size	Ø42mm		
Safety Rating	CE CAT.III1000V CAT.III600V RoHS		



MCH-9810B (MOQ100)**EARTH RESISTANCE CLAMP TESTER**

数显钳形接地电阻表

Specifications	Range	Accuracy	Resolution
Resistance	0.01Ω ~ 0.999Ω	±(1.5%+0.01Ω)	0.001Ω
	1Ω ~ 9.99Ω	±(1.5%+0.1Ω)	0.01Ω
	10Ω ~ 99.9Ω	±(2.0%+0.3Ω)	0.1Ω
	100Ω ~ 199.9Ω	±(3.0%+1Ω)	1Ω
	200Ω ~ 400Ω	±(6.0%+5Ω)	5Ω
	400Ω ~ 600Ω	±(10%+10Ω)	10Ω
	600Ω ~ 1200Ω	approx.20%	20Ω
Current	100mA	±(2.5%+1mA)	0.1mA
	300mA	±(2.5%+2mA)	0.3mA
	1A	±(2.5%+0.003A)	0.001A
	3A	±(2.5%+0.01A)	0.003A
	10A	±(2.5%+0.03A)	0.01A
	40A	±(2.5%+0.05A)	0.03A

Features	
Auto Ranging	√
Data logging And recall	99 groups
Alarm Limit Setting	Setting Alarm threshold In 1Ω to 100Ω
LBD	Low Battery Display
Data Hold	√
Display	9999 Counts

General	
Power Supply	9V6F22 Battery
Product Size	54mmx104mmx276mm(2.1" x4.1" x10.9")
Product Weight	1050g(2.3lb)
Category	CE CAT.II600V RoHS

**MCH-9830F****DIGITAL ANEMOMETER METER**

数显风速计

Air Velocity	Range	Accuracy	9830F
m/s(meter per second)	0.40~30.0	±(2.0% reading + 50)	√
ft/m(feet per minute)	80~5900	±(2.0% reading + 50)	√
km/h(kilometer per hour)	1.4~108.0	±(2.0% reading + 50)	√
mile/h(mile per hour)	0.9~67.0	±(2.0% reading + 50)	√
Knots(nautical miles per hour)	0.8~58.0	±(2.0% reading + 50)	√

Air Flow	Range	Area	9830F
CFM	0 to 99990	0 to 9.999ft2	√
CMM	0 to 99990	0 to 9.999ft2	√
CMS	0 to 9999	0 to 9.999 m ²	√

General	
Power Supply	1x 9V 6 F 22
Product Size	165mm x 85mm x 38mm(6.5" x 3.3" x1.5")
Product Weight	200g (0.41b)
Category	CE RoHS



MCH-9831B

DIGITAL ANEMOMETER METER WITH TEMPERATURE & HUMIDITY

数显风速风温/湿度仪

Air Velocity	Range	Accuracy	9831B
m/s(meter per second)	0.40~30.0	±(2.0% reading + 50)	√
ft/m(feet per minute)	80~5900	±(2.0% reading + 50)	√
km/h(kilometer per hour)	1.4~108.0	±(2.0% reading + 50)	√
mile/h(mile per hour)	0.9~67.0	±(2.0% reading + 50)	√
Knots(nautical miles per hour)	0.8~58.0	±(2.0% reading + 50)	√
Air Temperature	-20 to 60°C(-14 to 140°F)	1.5°C(±2.7°F)	√
Air Relative Humidity	0 to 100% RH	± 3 %	√
Air Flow	Range	Area	9831B
CFM	0 to 99990	0 to 9.999ft ²	√
CMM	0 to 99990	0 to 9.999ft ²	√
CMS	0 to 9999	0 to 9.999 m ²	√
Flow Area Setting			√
MAX/MIN Function			√
Display Back light			√
Auto Power Off			√
*C/*F Selection			√
Ambient , Dew Point & Wet Bulb Temperature Selection			√
Low Battery Indication			√
USB Interface			√
General			
Power Supply	1 x 9V 6 F 22		
Product Size	165mm x 85mm x 38mm(6.5" x 3.3" x1.5")		
Product Weight	200g (0.41b)		
Category	CE RoHS		



MCH-9831C

DIGITAL LUX METER

数显光照度计

Specifications	Range
Measurement range	0~200000Lux/ 0~20000FC
Accuracy	+3%
Resolution	0.01Lux/0.01FC
Display	2000 counts
Analog Bar Indication	√
Auto Range	√
Manual Range	√
Auto Power Off	√
MAX/MIN Function	√
Relative Measurement	√
Peak Measurement	√
FC/Lux Unit Selection	√
Data Hold	√
Display Backlight	√
Low Battery indication	√
General	
Power Supply	1 x 9V 6F22 Battery
Product Size	170mm x89mm x43mm(6.7" x3.5" x1.7")
Product Weight	177g(0.39b)
Category	CE RoHS



MCH-9820A

THREE PHASE DIGITAL POWER CLAMP METER

三相数显谐波钳型功率表

Specifications	Range	Accuracy
AC Voltage	0.1~600V	±(1.2%+5)
AC Current	0.1A~1000A	±(2.0%+5)
Active Power	0.1kW~600kW	±(3.0%+5)
Apparent power	0.1kVA~600kVA	±(3.0%+5)
Reactive power	0.1kVAr~600kVAr	±(4.0%+5)
Power Factor	0.3~1	±((0.02+2)
Active Energy	0.001kWh~10000kWh	±(3.0%+2)
Frequency	20Hz~1000Hz	±0.5%
Feature	Auto Power Off	√
Auto Ranging	√	
Max/min	√	
Data Hold	√	
Display Back Light	√	
Jaw opening	Ø50mm/2.0"	
Data logging And recall	28 groups	
LBD	Low Battery indication	
True RMS	True Root Mean Square Measurement	
Display	9999 counts	
Rs232 Interface	√	
General	Power Supply	4 x 1.5V AA Batteries
Product Size	300mm x103mm x51mm(11.8" x4.1" x2.0")	
Product Weight	640g(1.4lb)	
Category	CE CAT .III 600V RoHS	



MCH-9820B

HARMONIOUS POWER CLAMP METER

三相数显谐波钳型功率表

Specifications	Range	Accuracy
AC Voltage	0.1~600V	±(1.2%+5)
AC Current	0.1A~1000A	±(2.0%+5)
Active Power	0.1kW~600kW	±(3.0%+5)
Apparent power	0.1kVA~600kVA	±(3.0%+5)
Reactive power	0.1kVAr~600kVAr	±(3.0%+5)
Power Factor	0.3~1	±(0.02+2)
Harmonic Measurement (fundamental frequency)	Harmonic NO.1	±(3.0%+10)
	Harmonic NO.2-6	±(3.5%+10)
	Harmonic NO.7-8	±(4.5%+10)
	Harmonic NO.9-10	±(5.0%+10)
	Harmonic NO.11-15	±(7.0%+10)
	Harmonic NO.16-20	±(10%+10)
Feature	Auto Power Off	√
Auto Ranging	√	
Data Hold	√	
Display Back Light	√	
Jaw opening	Ø50mm/2.0"	
Data logging And recall	100groups	
LBD	Low Battery indication	
True RMS	True Root Mean Square Measurement	
Display	6000 counts	
Rs232 Interface	√	
General	Power Supply	4 x 1.5V AA Batteries
Product Size	300mm x103mm x51mm(11.8" x4.1" x2.0")	
Product Weight	640g(1.4lb)	
Category	CE CAT .III 600V RoHS	



MCH-9830

DIGITAL EARTH RESISTANCE TESTER

数显接地电阻测试仪

Resistance	Range	Accuracy	Resolution
Earth Ground Resistance	0Ω ~ 29.99Ω	±(2%+6dgt)	0.01Ω
	30Ω ~ 99.9Ω	±(3%+3dgt)	0.1Ω
	100Ω ~ 999Ω	±(3%+3dgt)	1Ω
	1.00kΩ ~ 4.0kΩ	±(3%+3dgt)	10Ω
Voltage	Range	Accuracy	Resolution
Earth voltage	0V ~ 200V(50V ~ 60Hz)	±(1%+5dgt)	0.1V
Features	»Digital Display & Analog Bars Display		
	»2 Pole and 3 Pole Mode		
	»Earth Resistance By Constant Current Inverter 800Hz/3mA		
	»MAX/MIN/AVG/REL Measurement Functions		
	»Data Logging:100 group		
	»Display Back Light		
	»Low Battery Indication		
» Auto Power Off			
General			
Power Supply	6x1.5v AA batteries		
Product Size	180mm x 140mm x 65mm (7.1" x 5.5" x 2.6")		
Product Weight	950g(2.0lb)		
Category	CE CAT.III1000V RoHS		



MCH-9831

RCD/LOOP TESTER

漏电开关回/环路测试仪

Specifications	Range	Accuracy	Resolution
Tripping time	x1 IΔN300(slow 500ms)	±3ms	0.1ms
	x5 IΔN40ms(slow 150ms)		
Tripping Current	(0.2-1.1)IΔN	±0.1IΔN	0.5IΔN
Contact Voltage	0~99.9V	±(10%+0.2V)	0.01/0.1V
Alternating Voltage(Ui-NUL-L,UL-E)	0~440V	±(3%+3V)	1V
Frequency	DC,45~65Hz	±1Hz	1Hz
Loop Resistance(RL)	0.1~2000Ω	±(10%+0.2d)	0.1Ω
RL Current Test	0.51 IΔN	±(10%+10d)	0.5IΔN
Multiplying Power of Measuring Current	x0.5,x1,x5		
Current Level(IΔN)	10mA,30mA,100mA,300mA,500mA		
Trigger Phase Angle	0°or 180°		
Feature	Auto Power Off		√
	Display Back Light		√
	Data logging And recall		100groups
	Low Battery indication		√
USB2.0 Interface		√	
General			
Power Supply	6x1.5v AA batteries		
Product Size	180mm x 140mm x 65mm (7.1" x 5.5" x 2.6")		
Product Weight	950g(2.0lb)		
Category	CE CAT.IV600V RoHS		



MCH-9850A

DIGITAL INSULATION TESTER

数显绝缘电阻测试仪

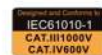
	Source Output Voltage	Measuring Range
Insulation Tests	50V(0%~+20%)	0.01MΩ~50MΩ±(3%+5)
	100V(0%~+20%)	0.01MΩ~100MΩ±(3%+5)
	250V(0%~+20%)	0.01MΩ~250MΩ±(3%+5)
	500V(0%~+20%)	0.01MΩ~500MΩ±(3%+5)
		1.00GΩ~5.00GΩ±(5%+0.1GΩ)
	1000V(0%~+20%)	5.00GΩ~10.00GΩ±(10%+0.2GΩ)
Short Circuit Current	1.8mA	
Multimeter Functions	DC Voltage Test	0.1~1000V±0.5%
	AC Voltage Test	0.1~750V±1%
	Continuity Test	0.01Ω~200Ω±0.5%
Features	» Design according to the IEC61010-1:CAT III 1000V, CAT IV 600V	
	» Auto Calculate PI and DAR	
	» Store /Read Function	
	» Compare function	
	» Auto discharge for capacitive load	
	» Timer Function for insulation test	
	» Lock function for insulation test	
	» Low Battery Indication	
	» DCV and ACV Test	
	» Continuity test	
» Auto Power Off		
» Digital and analog display		
General		
Power Supply	6x1.5v AA Batteries	
Product Size	180mm x 140mm x 65mm (7.1" x 5.5" x 2.6")	
Product Weight	950g(2.0lb)	
Category	CE CAT III 1000V .CAT IV 600V RoHS	

MCH-9850B

DIGITAL INSULATION TESTER

数显绝缘电阻测试仪

	Source Output Voltage	Measuring Range
Insulation Tests	250V(0%~+20%)	0.01MΩ~250MΩ±(3%+5)
	500V(0%~+20%)	0.01MΩ~500MΩ±(3%+5)
	1000V(0%~+20%)	0.01MΩ~1000MΩ±(3%+5)
		1.00GΩ~5.00GΩ±(5%+0.1GΩ)
		5.00GΩ~10.00GΩ±(10%+0.2GΩ)
	2500V(0%~+20%)	0.1MΩ~2.00GΩ±(3%+5)
	2.00GΩ~20.00GΩ±(5%+0.2GΩ)	
	20.0GΩ~100.0GΩ±(10%+2GΩ)	
Short Circuit Current	2mA	
Multimeter Functions	DC Voltage Test	0.1~1000V±0.5%
	AC Voltage Test	0.1~750V±1%
	Continuity Test	0.1Ω~200Ω±0.5%
Features	» Design according to the IEC61010-1 1000V CAT III 600V IV	
	» Auto Calculate PI and DAR	
	» Store /Read Function	
	» Compare function	
	» Auto discharge for capacitive load	
	» Timer Function for insulation test	
	» Lock function for insulation test	
	» DCV and ACV Test	
	» Continuity test	
	» Auto Power Off	
» Digital and analog display		
General		
Power Supply	6x1.5V LR 14 batteries	
Product Size	180mm x 140mm x 65mm (7.1" x 5.5" x 2.6")	
Product Weight	950g(2.0lb)	
Category	CE CAT.III 1000V RoHS	

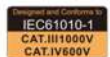


MCH-9810

MULTI-FUNCTIONS WIRE TRACKERS

可带电寻线测试仪

Features	
Wire track	directly track wire type: RJ45,RJ11 Track other wire through the attachment
Sequence collation	Open circuit, short circuit, detection of cable line sequence
Network wire collation	Test device used with UTP (Unshield Twisted Pair) and STP (Shield twisted Pair) wiring
	Tests for open circuits, shorts, miswires, reversals, and split pairs Allow one person to test T568A, T568B, 10Base-T, and Token Ring
DC level test	DC level test
Telephone line test	Identify the state of working telephone line(clear,ringing,busy)
Continuity	Judge continuity of the cables or wires
Switch port collation	detection switch connected condition
General	
Power Supply	Receiver: 9V 6F22 Battery Emitter: 3x1.5V AA
Product Size	Receiver: 212mm x 45mm x 28mm
	Emitter: 120mm x 66mm x 31mm
Product Weight	Receiver: 120g
	Emitter: 160g
Category	CE CAT.III 300V RoHS



MCH-9900

THREE PHASE ROTATION INDICATOR

三相马达相序指示仪

Specifications	Description
Phase sequence detection	Non-contact the rotation direction of the motor
Operating Voltage	120V~400V AC
Current Consumption	≤20mA
Frequency Range	2Hz ~400Hz
General	
Power Supply	1 x 9V6F22 Battery
Product Size	128mm x 70mm x 30mm(5" x 2.75" x 1.18")
Product Weight	168g(0.37lb)
Category	CE CAT.III 600V RoHS

