



Boost Smart World and Technology Innovation



# Electronic Testing and Measuring Instruments Selection Guide

- 5G Cellular-5G/WIFI
- UWB/RFID/ ZIGBEE
- Digital Bus/Ethernet
- Optical Communication
- Digital/Analog/RF Chip
- Memory and MCU Chip
- Third-Generation Semiconductor
- Solar Photovoltaic Cells
- New Energy Automobile
- PV/Inverter
- Power Test
- Automotive Electronics

Provide Testing and Measuring Products and Solutions for Industry Customers

### HEADQUARTER

**RIGOL TECHNOLOGIES CO., LTD.**  
 No.8 Keling Road, New District,  
 Suzhou, JiangSu, P.R.China  
 Tel: +86-400620002  
 Email: info-cn@rigol.com

### JAPAN

**RIGOL JAPAN CO., LTD.**  
 5F, 3-45-6, Minamiotsuka, Toshima-Ku,  
 Tokyo, 170-0005, Japan  
 Tel: +81-3-6262-8932  
 Fax: +81-3-6262-8933  
 Email: info.jp@rigol.com

### EUROPE

**RIGOL TECHNOLOGIES EU GmbH**  
 Carl-Benz-Str.11  
 82205 Gilching  
 Germany  
 Tel: +49(0)8105-27292-0  
 Email: info-europe@rigol.com

### KOREA

**RIGOL KOREA CO., LTD.**  
 5F, 222, Gonghang-daero,  
 Gangseo-gu, Seoul, Republic of Korea  
 Tel: +82-2-6953-4466  
 Fax: +82-2-6953-4422  
 Email: info.kr@rigol.com

### NORTH AMERICA

**RIGOL TECHNOLOGIES, USA INC.**  
 10220 SW Nimbus Ave.  
 Suite K-7  
 Portland, OR 97223  
 Tel: +1-877-4-RIGOL-1  
 Email: sales@rigol.com

### For Assistance in Other Countries

Email: info.int@rigol.com



**RIGOL**® is the trademark of **RIGOL TECHNOLOGIES CO., LTD.** Product information in this document is subject to update without notice. For the latest information about **RIGOL**'s products, applications and services, please contact local **RIGOL** channel partners or access **RIGOL** official website: [www.rigol.com](http://www.rigol.com)

# About RIGOL

Founded in 1998, RIGOL TECHNOLOGIES CO., LTD. is a global leader in electronic measurement instruments. Our focus lies in spreading the development and breakthroughs of cutting-edge technology in the realm of general electronic measurement instruments. With the mission of "Enabling Technology Exploration, Empowering Possibilities and More", we bring together talented individuals with great potential and visionary aspirations to deliver testing and measuring products and solutions that accelerate technological innovation.

RIGOL steadfastly upholds a commitment to original technology innovation, prioritizing independent research and development of key core technologies. Our brand footprint extends across more than 90 countries and regions worldwide, ensuring customers in the testing and measurement industries have access to RIGOL's versatile electronic measurement products. Our offerings include digital oscilloscopes, RF signal generators, waveform generators, power supplies, electronic loads, multimeters, and data acquisition tools. Continuously innovating our product lines, we provide multi-level solutions at the chip, module, and system levels. These solutions cater to the diverse needs of customers in sectors such as communications, renewable energy, automotive, semiconductors, educational research, and system integration. By empowering our customers with these innovative solutions, we enable them to unlock a realm of possibilities and achieve more in their endeavors.

Headquartered in Suzhou, China, RIGOL has established its research and development centers in Beijing, Shanghai, and Xi'an. Additionally, RIGOL has set up its overseas subsidiaries in Portland (U.S.A), Munich (Germany), Tokyo (Japan), Seoul (Korea), Penang (Malaysia), and Singapore. In alignment with our commitment to meeting the evolving technology challenges faced by our customers, RIGOL has established international marketing representative offices in key cities such as Bangalore, Sao Paulo, and Hanoi, to support our customers better. Through our dedicated local technology experts and partners, RIGOL has demonstrated its commitment to creating value for over 100,000 customers around the globe.

RIGOL holds self-developed core intellectual property rights, continually fortifying our technical prowess in the high-end testing and measuring domain. As of December 31, 2024, we've secured 524 authorized patents, among which 437 are invention patents. Notably, RIGOL's core technology was honored with the 24th China Patent Gold Award. Recognized as one of the fifth batch of "little giant" firms, we've also achieved notable mentions, including appearances on the Top 500 Chinese Enterprise Patent list for 2019, 2020, and 2022. In 2023, we were bestowed the prestigious title of "National Intellectual Property Demonstration Enterprise." Our accolades extend to over 70 prizes, encompassing esteemed recognitions such as the "Second Prize of Science and Technology of China Machinery Industry," "Excellent Prize of Suzhou Patent Award," "R&D100 Awards," "Suzhou Quality Award," and "World Electronics Achievement Awards."

RIGOL also holds various qualifications, including membership in the International Bus LXI Alliance and CNAS certification for our laboratory. Engaging actively in standardization efforts, RIGOL serves as a member of the 5th National Technical Committee for Standardization of Electronic Measuring Instruments. In this capacity, RIGOL has participated in the drafting and formulation of ONE National standard, contributed significantly to leading the drafting and formulation of three industry general specifications

# RIGOL Product Line

- ✔ Digital Oscilloscope
- ✔ RF Instrument
- ✔ Waveform Generator
- ✔ Power Supply and Electronic Load
- ✔ Multimeter and Data Acquisition System

-  **Founded in 1998**
-  **Dual Driving Strategy Market**  
Technology Core Strength
-  **4 R&D Centers**  
Beijing/Suzhou/Shanghai/Xi'an
-  **Fields with RMB100 billion Market Scale**  
Communications/ New Energy/ Semiconductors
-  **Technology Self-owned and Controllable**  
Adhere to Self-reliance and Originality Master Key and Core Technologies
-  **Multi-level Solutions**  
System/Module /Chip Levels



# MHO/DHO5000 Series High-Resolution Digital Oscilloscope

**NEW**








## Features

<b>4/6/8</b> Analog Channels	<b>1 GHz</b> Analog Bandwidth	<b>4 GSa/s</b> Real-time Sample Rate	<b>16</b> Digital Channels (for MHO models)
<b>12-bit</b> Vertical Resolution	<b>500 Mpts</b> Memory Depth (Std.)	<b>50 MHz @ 2CH</b> Built-in Signal Generator (Opt.)	

## Benefits



-  **4/6/8 Analog Channels**  
Multiple and Extendable Functions Test.
-  **4096 High Vertical Resolution**  
Detailed and Complicated Waveforms can be Observed.
-  **Multiple Functions Inside One Equipment**  
Built-in Logic, Protocol Analyzer, and Signal Generator.
-  **Compact Size**  
5U Height for Standard Rack Mount
-  **Easy to Carry and Test**  
Powered by Battery Pack and Easy for Movement.

## Applications



Motor Controller and 3-Phase Power Analyzer



Power Semiconductor Test



Power Supply Design

## DS/MSO Series Oscilloscope Selection Table

Model	Max. Bandwidth (MHz)													No. of Analog Channels	No. of Digital Channels	Max. Real-time Sample Rate	Vertical Resolution	Max. Memory Depth	Built-in Signal Source	LCD				
	50	70	100	200	350	500	600	750	1000	1500	2000	3000	5000								6000	8000	10000	13000
DS80000 <sup>①</sup>														•	•	•	•	4	N/A	40 GSa/s	8-bit	4 Gpts (Opt.)	N/A	15.6-inch 1920×1080
DS70000 <sup>①</sup>																		4	N/A	20 GSa/s	8-bit	2 Gpts (Opt.)	N/A	15.6-inch 1920×1080
DS8000-R <sup>①</sup>					•													4	N/A	10 GSa/s	8-bit	500 Mpts	1-CH, 25 MHz (Opt)	N/A
MSO8000A																		4	16	10 GSa/s	8-bit	500 Mpts	2-CH, 25 MHz (Opt.)	10.1-inch 1024×600
MSO8000																	4							
MSO7000				•	•	•	•											4	16	10 GSa/s	8-bit	500 Mpts (Opt.)	2-CH, 25 MHz (Opt.)	10.1-inch 1024×600
DS7000				•	•	•	•										4	N/A	N/A					
MSO5000		• <sup>②</sup>	• <sup>②</sup>															2	16	8 GSa/s	8-bit	200 Mpts (Opt.)	2-CH, 25 MHz (Opt.)	9-inch 1024×600
			•	•	•	•												4						
DS1000Z <sup>①</sup>				•	•													2	N/A	1 GSa/s	8-bit	24 Mpts	N/A	7-inch 800×480
		•																4						
			•	•															4	16			2-CH, 25 MHz	



DS80000 Series Digital Oscilloscopes



DS70000 Series Digital Oscilloscopes



DS8000-R Series Digital Oscilloscopes



MSO8000 Series Digital Oscilloscopes



DHO5000 Series Digital Oscilloscopes



DHO900 Series Digital Oscilloscopes

## High-Resolution Digital Oscilloscope Selection Table

Model	Max. Bandwidth (MHz)										No. of Analog Channels	No. of Digital Channels	Max. Real-time Sample Rate	Vertical Resolution	Max. Memory Depth	Built-in Signal Source	LCD				
	70	100	125	200	250	350	400	500	800	1000											
MHO5000											•	•	4	16	4 GSa/s	12-bit	500 Mpts	50 MHz, 16-bit, 2-CH	10.1-inch 1280×800		
											•	•	6	16				N/A			
DHO5000											•	•	4	N/A	4 GSa/s	12-bit	500 Mpts	N/A	10.1-inch 1280×800		
											•	•	8								
DHO4000									•						4	N/A	4 GSa/s	12-bit	500 Mpts (Opt.)	N/A	10.1-inch 1280×800
MHO2000															4	16	4 GSa/s	12-bit	500 Mpts	50 MHz, 2-CH	10.1-inch 1280×800
DHO1000		•	•												2	N/A	2 GSa/s	12-bit	100 Mpts (Opt.)	N/A	10.1-inch 1280×800
		•	•												4						
															2						
															4						
DHO900															4	16	1.25 GSa/s	12-bit	50 Mpts	N/A	7-inch 1024×600
																				1 CH, 25 MHz	
DHO800		•	•												2	N/A	1.25 GSa/s	12-bit	25 Mpts	N/A	7-inch 1024×600
		•	•												4						

Note: ① Does not support using the option to perform the bandwidth upgrade ② Support using the option to upgrade to 4 channels

### Five Key Specifications for Oscilloscope Selection

Bandwidth	Sample Rate	Vertical Resolution	Memory Depth	Digital Channel
The bandwidth of the oscilloscope determines the frequency range that the oscilloscope can accurately measure. A general rule of thumb is that the oscilloscope bandwidth shall be 5 times higher than the frequency of the signal under test.	Sample rate describes the frequency at which the instrument samples the data. The higher sample rate provides better resolution and more details of the signal being captured.	The vertical resolution determines the instrument's ability to accurately display and measure small voltage changes within a signal. The higher the vertical resolution, the more detailed voltage variation of the signal can be accurately displayed.	Memory depth describes the number of points that can be captured and stored. Generally speaking, a deeper memory depth allows for the capturing of waveforms over longer periods or maintains a higher sample rate across a wider time base range.	Mixed signal oscilloscopes (MSOs) not only allow you to observe analog signals up to 4 channels but also enable the capturing, triggering, and analysis of signals up to 16 digital channels simultaneously. Additionally, they facilitate analysis of parallel bus signals.

# Probe Model

Probe Category			Product Model	Key Specifications	DS70000	DS8000-R	MSO8000/A	MSO/DS7000	MSO5000	MHO/DHO5000	DHO4000	MHO2000	DHO1000	DHO900	DHO800	DS1000Z-E	DS1000Z				
Voltage Probes	Passive Probes		PVP2150	150 MHz, 10:1/1:1, Passive High-Impedance Probe (single)	•	•	•	•	•	•	•	•	•	•	•	•	•				
			PVP2350	350 MHz, 10:1/1:1, Passive High-Impedance Probe (single)	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
			PVP3150	150 MHz, 10:1/1:1, Passive High-Impedance Probe (single)	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
			RP3500A	500 MHz Passive High-impedance Probe	•	•	•	•		•	•	•									
			RP1010H	10 kV 50 MHz High-Voltage Probe	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
			RP1018H	18 kV 150 MHz High-voltage Probe	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
			RP1300H	300 MHz High-Voltage Probe (2 kV)	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
	Active Probes	Differential Probes	High-Voltage Differential Probes	PHA0150	High-Voltage Differential Probe, DC-70 MHz, 1500 V	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
				PHA1150	High-Voltage Differential Probe, DC-100 MHz, 1500 V	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
				PHA2150	High-Voltage Differential Probe, DC-200 MHz, 1500 V	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
			Low-Voltage Differential Probes	RP1025D	25 MHz, 700 V	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
				RP1050D	50 MHz, 3.5 kV	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
				RP1100D	100 MHz, 3.5 kV	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
		Single-ended Probes	PVA7250	2.5 GHz Active Differential Probe	•	•	•	•		•	•										
			RP7080	800 MHz Active Differential Probe	•	•	•	•		•	•										
			RP7150	1.5 GHz Active Differential Probe	•	•	•	•		•	•										
			PVA8350	3.5 GHz Active Differential Probe	•	•	•	•		•											
			PVA8700	7 GHz Active Differential Probe	•	•															
			RP7080S	800 MHz Active Single-ended Probe	•	•	•	•		•	•										
			RP7150S	1.5 GHz Active Single-ended Probe	•	•	•	•		•	•										
PVA8150S	1.5 GHz Active Single-ended Probe, Input Impedance 1 MΩ	•	•	•	•		•	•													
Current Probes		PCA1030	Current Probe: 50 MHz, 30 A	•	•	•	•		•	•	•										
		PCA1150	Current Probe: 10 MHz, 150 A	•	•	•	•		•	•	•										
		PCA1500	Current Probe: 2 MHz, 500 A	•		•			•	•	•										
		PCA2030	Current Probe: 100 MHz, 30 A	•	•	•	•		•	•	•										
		RP1000P	4-CH Power Supply	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
		RP1001C	300 kHz, 100 ADC	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
		RP1002C	1 MHz, 70 ADC	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
		RP1003C	50 MHz, 30 A, required to purchase the RP1000P power supply	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
		RP1004C	100 MHz, 30 A, required to purchase the RP1000P power supply	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
		RP1005C	10 MHz, 150 A, required to purchase the RP1000P power supply	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
		RP1006C	2 MHz, 500 A, required to purchase the RP1000P power supply	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
Logic Analyzer Probes		PLA2216	16-channel Logic Analyzer Probe						•					•							
		RPL2316	16-channel Logic Analyzer Probe			•	•														
		RPL1116	16-channel Logic Analyzer Probe															•			
		PLA3204	4-CH Logic Analyzer Probe							•		•									
Optical-fiber Isolated Probe		PIA1020	200 MHz Optical-fiber Isolated Probe, with 2-meter Fiber Cable	•	•	•			•	•	•										
		PIA1050	500 MHz Optical-fiber Isolated Probe, with 2-meter Fiber Cable	•	•	•			•	•	•										
		PIA1100	1 GHz Optical-fiber Isolated Probe, with 2-meter Fiber Cable	•	•	•			•	•	•										

# Function/Arbitrary Waveform Generators

## Configuration Table

Model	Max. Frequency (MHz)														CH	Max. Sample Rate	Arb Memory Depth	Waveform Generation Technology	Modulation
	25	30	50	60	70	100	150	160	200	250	350	500	5000						
DG70000														•	2/4	10 GSa/s for real output 12 GSa/s for complex output	1.5 Gpts	SiFi III	IQ Modulation (Opt.)
DG5000 Pro															2	2.5 GSa/s	64 Mpts(128 Mpts opt.)	SiFi II	AM,FM,PM,ASK,FSK,PSK,PWM,SUM,IQ
DG5000															1/2	1 GSa/s	128 Mpts	DDS	AM, FM, PM, ASK, FSK, PSK, PWM, IQ
DG4000															2	500 MSa/s	16 kpts	DDS	AM, FM, PM, ASK, FSK, PSK, BPSK, QPSK, 3FSK, 4FSK, OSK, PWM
DG2000															2	250 MSa/s	16 Mpts	SiFi II	AM, FM, PM, ASK, FSK, PSK, PWM
DG1000Z	•	•													2	200 MSa/s	8 Mpts/2 Mpts (DG1022Z) (16 Mpts opt.)	SiFi	AM, FM, PM, ASK, FSK, PSK, PWM
DG900 Pro															2	1.25 GSa/s	16 Mpts (32 Mpts opt.)	SiFi II	AM, FM, PM, ASK, FSK, PSK, PWM, SUM
DG800 Pro	•														1/2	625 MSa/s	2 Mpts (8 Mpts opt.)	SiFi II	AM, FM, PM, ASK, FSK, PSK, PWM, SUM



DG70000 Series Arbitrary Waveform Generator



DG2000 Series Function/Arbitrary Waveform Generator



DG5000 Pro Series Function/Arbitrary Waveform Generator



RSA5000 Series Spectrum Analyzer



RSA3000 Series Spectrum Analyzer



DSG5000 Series Microwave Signal Generator



DSG3000B Series RF Signal Generator

## Models and Options

	DG70000 Series		DG5000 Pro Series		DG5000/DG4000 Series		DG2000 Series		DG1000Z Series		DG900 Pro		DG800 Pro	
Option	DG70000-3RL	1.5 Gpts Memory Depth Upgrade Option	DG5000 Pro-IQ	IQ Modulation Option	PA1011	Power Amplifier	UltraStation Adv.	Advanced Arbitrary Waveform Editing Software	PA1011	Power Amplifier	DG900 Pro-3RL	32 Mpts/CH Memory Depth Upgrade Option	DG800 Pro-3RL	8 Mpts Memory Depth Upgrade Option
	DG70000-SEQ	Complex Sequence Function	DG5000 Pro-MPUL	Multi-pulse Output Option										
	DG70000-DC	DC Amplifier Output	DG5000 Pro-SEQ	Advanced Sequence Function	UltraStation Adv.	Advanced Arbitrary Waveform Editing Software			UltraStation Adv.	Advanced Arbitrary Waveform Editing Software				
	DG70000-DIGUP	DUC and IQ Modulation	DG5000 Pro-2RL	128 Mpts/CH (Max.) Arb Length Upgrade Option									DG5000 Pro-PJ	Pattern Option

# Spectrum Analyzers

Model	Frequency Band (GHz)								RBW	Real-time Analysis Bandwidth	VSA	EMI	Advanced Meas.	ASK/FSK	EMI	VSWR	Tracking Generator	VNA	Preamp	OCXO
	0.5	1	1.5	3	3.2	4.5	6.5	7.5												
RSA5000N									1 Hz ~ 10 MHz	25 MHz (Opt. 40 MHz)	RSA5000-VSA	RSA5000-EMI	RSA5000-AMK	RSA5000-VSA	RSA5000-EMI	Std.	Std.	Std.	RSA5000-PA	OCXO-C08
RSA5000/-TG									1 Hz ~ 3 MHz (Opt. 10 MHz)	10 MHz (Opt. 25/40 MHz)	N/A	RSA3000-EMI	RSA3000-AMK	N/A	RSA3000-EMI	Std.	-TG Model	N/A	RSA3000-PA	OCXO-C08
RSA3000N									1 Hz ~ 3 MHz	10 MHz	N/A	RSA3000E-EMI	RSA3000E-AMK	RSA3000E-ASK/FSK	RSA3000E-EMI	Std.	-TG Model	N/A	RSA3000E-PA	OCXO-C08
RSA3000/-TG									1 Hz ~ 3 MHz	10 MHz	N/A	S1210	AMK-DSA800	S1220	EMI-DSA800	VSWR-DSA800	-TG Model	N/A	Built-in, Std.	N/A
RSA3000E/-TG									10 Hz ~ 1 MHz	N/A	N/A	S1210	AMK-DSA800	S1220	EMI-DSA800	VSWR-DSA800	-TG Model	N/A	Built-in, Std.	N/A
DSA800/-TG									100 Hz ~ 1 MHz	N/A	N/A	N/A	AMK-DSA800	N/A	EMI-DSA800	N/A	N/A	N/A	Built-in, Std.	N/A
DSA800E/-TG																				
DSA700	•	•																		

# RF Signal Generators

Model	Frequency Band (GHz)									CH	Amplitude Range	Reference Clock Stability	Phase Noise	Modulation	OCXO	Pulse Train	IQ Modulation	IQ PC Software
	1.5	2.1	3	3.6	6.5	12	13.6	20										
DSG5000										2/4/6/8	-30 dBm ~ +25 dBm	<0.5 ppm <5 ppb (with option OCXO-D08)	-133 dBc/Hz @ 1 GHz, 10 kHz offset (typ.)	AM, FM, ØM, Pulse	OCXO-D08	DSG5000-PUG	N/A	N/A
DSG3000B-IQ										1	-110 dBm ~ +20 dBm (-110 dBm to +13 dBm for 13.6G model)	<1 ppm <5 ppb (with option OCXO-B08)	-116 dBc/Hz @ 1 GHz, 20 kHz offset (typ.)	AM, FM, ØM, Pulse, IQ	OCXO-B08	DSG3000B-PUG	Std.	Ultra IQ Station
DSG3000B										1	-110 dBm ~ +20 dBm	<1 ppm <5 ppb (with option OCXO-B08)	-116 dBc/Hz @ 1 GHz, 20 kHz offset (typ.)	AM, FM, ØM, Pulse	OCXO-B08	DSG3000B-PUG	N/A	N/A
DSG800A										1	-110 dBm ~ +13 dBm	<2 ppm <5 ppb (with option OCXO-B08)	-112 dBc/Hz @ 1 GHz, 20 kHz offset (typ.)	AM, FM, ØM, Pulse, IQ	OCXO-B08	DSG800-PUG	Std. for DSG800A model	Ultra IQ Station
DSG800	•									1	-110 dBm ~ +13 dBm	<2 ppm <5 ppb (with option OCXO-B08)	-112 dBc/Hz @ 1 GHz, 20 kHz offset (typ.)	AM, FM, ØM, Pulse	OCXO-B08	DSG800-PUG	N/A	N/A

## Programmable DC Electronic Loads

Model	Power	Voltage	Current	Freq.	High Frequency Option	Current Slew Rate	High Slew Rate Option	Voltage Readback Resolution	Current Readback Resolution	Readback Resolution Option	Interface	PC Software	
DL3021	200 W	150 V	40 A	15 kHz	FREQ-DL3	2.5 A/us	SLEWRATE-DL3	0.1 mV	1 mA	HIRES-DL3	USB Host, USB Device, RS232, LAN (opt., LAN-DL3)	Ultra Load	
DL3031	350 W		60 A										
DL3021A	200 W		40 A	30 kHz	Std.	3.0 A/us	Std.		0.1 mA	Std.			USB Host, USB Device, RS232, LAN
DL3031A	350 W		60 A										

## Digital Multimeters

Model	Resolution	Accuracy	Measurement Function	Interface
DM858E	5.5 digits	600 ppm	DCV, DCI, ACV, ACI, Resistance, Capacitance, Period, Frequency, Diode, Continuity, Temperature, and Any Sensor	USB Host, USB Device, LAN
DM858	5.5 digits	300 ppm		USB Host, USB Device, LAN
DM3058E	5.5 digits	150 ppm	DCV, DCI, ACV, ACI, Resistance, Capacitance, Period, Frequency, Diode, Continuity, Temperature, and Any Sensor	USB Host, USB Device, RS232
DM3058	5.5 digits			USB Host, USB Device, RS232, GPIB, LAN
DM3068	6.5 digits	35 ppm	DCV, DCI, ACV, ACI, Resistance, Capacitance, Period, Frequency, Diode, Continuity, Temperature, and Any Sensor	USB Host, USB Device, RS232, GPIB, LAN

## Programmable Linear DC Power Supplies

Model	CH	Output Range	Max. Power	Ripple & Noise	High Resolution	Monitor & Analyzer	Timer	Trigger Input/Output Channel	Interface				
DP711	1	30 V/5 A	150 W	<500 $\mu$ Vrms	HIRES-DP700	N/A	TIMER-DP700	N/A	RS232				
DP712	1	50 V/3 A	150 W										
DP811	1	20 V/10 A or 40 V/5 A	200 W	$\leq 350$ $\mu$ Vrms	HIRES-DP800	AFK-DP800	Std.	DIGITALIO-DP800	USB Host, USB Device, RS232/LAN (opt. INTERFACE-DP800)				
DP813	1	8 V/20 A or 20 V/10 A	200 W										
DP821	2	8 V/10 A    60 V/1 A	140 W										
DP822	2	20 V/5 A    5 V/16 A	180 W										
DP832	3	30 V/3 A    30 V/3 A, 5 V/3 A	195 W										
DP831	3	8 V/5 A    30 V/2 A, -30 V/2 A	160 W										
DP811A	1	20 V/10 A or 40 V/5 A	200 W										
DP813A	1	8 V/20 A or 20 V/10 A	200 W										
DP821A	2	8 V/10 A    60 V/1 A	140 W										
DP822A	2	20 V/5 A    5 V/16 A	180 W										
DP832A	3	30 V/3 A    30 V/3 A, 5 V/3 A	195 W										
DP831A	3	8 V/5 A    30 V/2 A, -30 V/2 A	160 W										
DP932E	3	30 V/3 A    30 V/3 A    6 V/3 A	198 W		$\leq 350$ $\mu$ Vrms	DP900-HIRES	Std.	-	-	USB Host, USB Device, LAN, Digital IO			
DP932U	3	32 V/3 A    32 V/3 A    6 V/3 A	210 W			DP900-HIRES					1 s (std.), 100 ms (with the option DP900-ARB)	DP900-DIGITALIO	USB Host, USB Device, LAN, Digital IO
DP932A	3	32 V/3 A    32 V/3 A    6 V/3 A	210 W	Std.		Std.					Std.	Std.	USB Host, USB Device, LAN, Digital IO (DP900-DIGITALIO)
DP2031	3	32 V/3 A    32 V/3 A    6 V/5 A	222 W	Std.		Std.					Std.	Std.	USB Host, USB Device, LAN, RS232, GPIB (opt.), three rear-panel output terminals



DL3000 Series Programmable DC Electronic Load



DM3000 Series Digital Multimeter



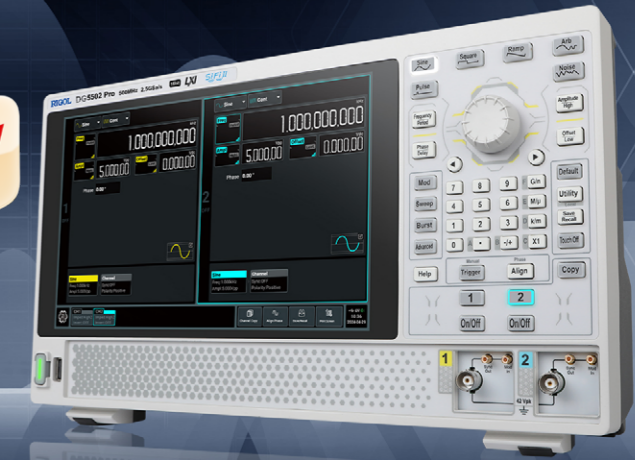
DP800 Series Programmable Linear DC Power Supply



DP2000 Series Programmable Linear DC Power Supply

## DG5000 Pro Series Function/Arbitrary Waveform Generator

**NEW**



### Features

**500 MHz**  
Analog Bandwidth

**2.5 Gsa/s**  
Maximum Sampling Rate

**16-bit**  
Vertical Resolution



**Ground Isolation**  
Enhancing Output Stability



**512**  
Waveform Event Sequence Modes



**170 MHz**  
Maximum Square Wave Frequency



**128 Mpts/CH**  
Maximum Arbitrary Wave Length

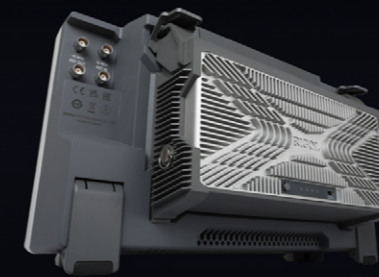


**0.8 ns**  
Minimum Rise Time



**10.1 inch 1280\*800**  
Touch Screen

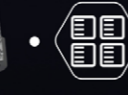
### Benefits



**Ground Isolation**  
Dual-channel ground isolation eliminates interference caused by ground loops, enhancing output stability.



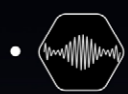
**Multi-pulse Output Function**  
Generates pulse signals with independently adjustable edges and pulse widths, assisting in quickly completing double-pulse tests.



**Advanced Sequence Function**  
Supports up to 512 waveform events and 512 repetitions, allowing for the one-time loading of multiple test cases that need to be executed in sequence, achieving seamless switching of test cases.



**10.1-inch High-definition Touch Screen**  
Facilitates parameter setting for dual-channel waveforms simultaneously.



**Supports a Rich Set of Modulation Functions**  
Provides AM, FM, PM, ASK, FSK, PSK, PWM to meet the needs of high-level teaching communication principle experiments, industrial field applications such as motor control, switching power supplies, etc.



**IQ Digital Modulation Function**  
Quickly generates IQ modulated signals for the verification of communication system performance, digital signal processing, and other applications.



**20th Harmonic Generator Function**  
Provides a more accurate measurement method for the performance testing of high-order filters, amplifiers, and other devices.



**Supports Power Supply from Battery Packs**  
Convenient for users to quickly generate test signals in outdoor or mobile scenarios.

### Applications



**Embedded Circuit Design and Testing**  
- Clock  
- Phase-Locked Loop Circuit  
- Audio DAC (Digital-to-Analog Converter)



**Power Device Performance Verification**  
- Dual-Pulse Test



**Automotive Electronics**  
- Control Unit Signal Simulation  
- Collision and Warning Signal Simulation



**Consumer Electronics**  
- Sensor Signals



**Medical and Industrial Electronics**  
- Ultrasonic Detection  
- Doppler Effect