Dilipow

DP5000/DP5000S

1.5kV Low Voltage Cable Harness Tester

🗘 Overview



- Two-wire and four- wire test
- Precise open/short test
- Conductance
- High current conduction test
- DCR test
- LCR test
- Insulation
- AC/DC hipot test
- ESD test
- FPC Test (flexible circuit boards) in consumer electronics and electric vehicles
- Traditional automotive wire/cable harness test
- DP5000 distributed tester is used for distributed testing of cable harnesses in aerospace, transport, and ships
- Max test points 1024

☆ Features



- Powerful function, suitable for various testing needs
- Four-wire method, maximum test point utilization
- Distributed testing extended points up to 20,000
- Modular test board design for easy expansion
- On-resistance test minimum resolution 10μΩ
- Programmable low voltage power supply 0~10V/1A
- Programmable high voltage power supply 0~1500V DC/1000V AC
- ESD element 1mA constant current excitation, test range 0~100V
- Test points can be arbitrarily configured as excitation or sampling
- LCR test, test frequency 50~10kHz

Software & interfaces



- User access management: administrators/programmers/operators three-level permissions
- 500 different projects management
- Self-learning test points to locate the connection relationship between points
- Support self-learning or manually divided test network segment
- Graphic editing visually performs test points configuration on connector graphics
- Allow to configurate test network segment and parameters. Users can configure parameters for OS, insulation test, etc
- System self-testing, used for fault diagnosis.
- Built-in multimeter can be used in any port.
- Support high-speed point finding and voice broadcasting
- Relay life detection
- PTC/NTC temperature conversion
- 16-bit IO port input and output
- Report print and edit, support printing in PDF and WORD formats
- Database and docking with MES

Applicable typical industry



- Automotive electronics
- Aerospace

- Energy storage, new energy batteries
- Wiring harness line automation

Application





- Wire harness detection of transmission
- Information and entertainment system detection
- Wire harness inspection of the air conditioning system
- Modern panel system deection

control system



Consumer Electronics

- Product internal FPC testing
- Internal PCB hard board detection
- Cable & connector detection
- Metal chassis conductivity testing



- Industrial connectors and cable testing
- Medical and other special cables testing
- Industrial electrical cabinet wiring inspection
- PV equipment connection line detection
- New energy vehicle wiring harness, power battery FPC flexible circuit board (FPC testing)
- Automotive universal wiring harnesses and cables testing
- Consumer electronics softboard testing, such as mobile phones softboard testing
- Spacecraft and satellites distributed harness testing
- Aircraft distributed wiring harness testing
- Rail transit distributed wiring harness testing

Distributed wire harness tester application





Aerospace Industry



Wiring of Satellites



- Distributed online detection of spacecraft and aircraft internal cables
- Supports two-wire and four-wire mixed test, with a maximum test points number up to 20000
- Support multi-level mapping of testing ports, and the wiring harness can be grouped and
- tested according to functions and fixture interfaces
- High speed self-learning, self-learning at 10000 points can be completed in just 3 minutes
 Conduction test provides adjustable current of 0-1A

Specification



Model			DP5000/DP5000S
Measuring Mode			Inner four-wire + outer four-wire
Maximum number of test points			1024/512
AC Output Voltage			50-1000V DC
DC Output Voltage			0-1500V DC
High Voltage Output Accuracy			±3%
High Voltage Measurement Accuracy			±3%
High Voltage Measurement Time			0.02s - 60s, user delay not included
Low Voltage Measurement Time			0.02s - 60s, user delay not included
O/S Measurement Time			500μS (1024 points, user delay not included)
O/S, Intermittence O/S, Quick Intermittence Open Circu		S,Quick Intermittence Open Circuit	2kΩ-100 kΩ
Test Items and Range	Inner Four-wire Test Conductance		0.1Ω-1ΜΩ
	Outer Four-wire Conductance Test	Measurement Range	1μΩ-100Ω
		Current Signal	≤1A
	AC Hipot Leakage Current		0.01mA-10mA
	DC Hipot Leakage Current		0.1μA-5mA
	DC Hipot Insulation Resistance		1ΜΩ-5GΩ
	DC Resistance	Measurement Range	100mΩ-20MΩ
		Level Signal	0-5V
		Current Signal	≤10mA
	LCR	Capacitances Measurement Range	10pF-100mF
		Resistance Measurement Range	100mΩ-20MΩ
		Inductance Measurement Range	10nH~100H
		Frequency Signal	50Hz/60Hz/100Hz/120Hz/1kHz/10kHz/50kHz
		Range Mode	AUTO/HOLD
		Level Signal	0.1/0.3V/1V
	Diode/Zener diodes	Test Range	0-100V
		Test Signal	1mA/100V
	Single-Side Test		Yes
	O/S Terminal Judge		Yes
Advanced Functions			Programmable continuous test/ Automatic point search/ Auto-diagnosis
Test Scan Mode			Automatic/manual/external
Measurement Signal			low voltage measurement signal
Storage Memory			Number of test files up to 500 sets
OS Voltage			5V
Panel			System/ Rapid/ Edit/ Function
Indicator			Pass/Fail HV LED red-green indicator lights/ Screen Display/ Sound
Dimension (W*H*D)			483*265*510 mm
Weight			25 kg

Application



DP5000S with max test points 512 DP5000 with max test points 1024 DP5000-D/DP5000-DA/DP5000-DB are distributed design



DP5000





DP5000-DA

DP5000-DB