

Igniter Circuit Testers

101-SQB Series



Description

Igniter Circuit Testers are ohmmeters that measure the resistance of electro-explosive circuits such as rocket igniters, explosive bolts, squibs, and blasting caps, using a test current which is as much as 1000 times less than a conventional precision low resistance ohmmeter.

Designed for testing squibs and other electrically detonated ordnance, Space Electronics' 101-SQB series of squib testers can test diodes and measure resistances with great accuracy while dramatically reducing the risks of accidental detonations because of their built-in fail-safe modules.

Tester Versions

Our 101-SQB squib testers are available in three versions:

- The rack-mounted 101-SQB-

RAK for integration in a rack with an isolated power system. It is specifically designed to be implemented as the core of a multi-channel tester.

- The tabletop 101-SQB-BTP for benchtop testing.

- The portable 101-SQB-PTU is a stand-alone unit.

Safety Features

- Fail-safe module limits test current. Since excessive test current could cause bodily injury or death, protection for all modes of failure or operator error is built into the squib tester. A sealed, tamperproof, fail-safe module guarantees that the test current will be less than 10 mA even under worst case conditions of simultaneous failure of multiple circuit elements.
- Fiberoptic Interface is standard on all squib tester units, which ensure safe meter integration and physical separation between the computer's power system and the squib.
- Isolated Power Supply. The power supply of our squib tester is 100% floating for safety

isolation between power source and the squib.

Ease of Use

- Direct reading. 4-wire test leads arrangement automatically compensates for lead resistance.
- Quick Reading. Squib tester stabilizes readings in less than 2 seconds. Readout is a large format LCD display with clear indication of measurement range and units, battery level, and calibration status.
- Digitally calibrated. Calibration of the squib tester is performed digitally, with no requirement to open the meter or trim internal or external potentiometers.

Key Benefits

- Detect missing or broken wires in the 4 wire test leads to the UUT. Diagnose and locate wiring errors that other testers would show as a resistance or open circuit reading.
- Immune to differences in lead resistances. Our squib testers are specifically designed to withstand unequal lead resistances on the 4 wire cable lines.

Technical Specifications

Range (Ohm)	Resolution (Ohm)	Accuracy (% of full scale)
20	0.001	0.05%
200	0.01	0.025%
2K	0.1	0.025%
20K	1	0.05%
200K	10	0.5%
2M	100	1%

Alternate ranges and diode testing are available. Calibration standards can be provided upon request. Additional options are available.