Igniter Circuit Testers

101-SQB-RAK

Description

Designed for testing squibs and other electrically detonated ordnance, Space Electronics' 101-SQB-RAK squib testers can safely test diodes and measure resistances with great accuracy. This ICT is designed to be installed in the customer's 19-inch rack or benchtop system.

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.
- Fiber-optic Interface is standard, which ensures safe meter integration and physical separation between the computer's power system and the squib.
- Isolated Power Supply. Designed to connect to customer's safety-approved 100% floating power source.

Remote Control and Data Logging

We offer optional software for remote readout and control of the tester from a computer. Software includes:

- Data Logging: data is saved to a database and exportable to Excel.
- Scripting: Engineers can define a UUT and write a script defining the circuit paths to test, the ranges to use, and pass/fail criteria. This sequence can be followed manually by operators or run automatically.
- Optional switching matrix front end can be custom built to your application to test multiple circuit paths automatically.
- Reporting: Software generates individual UUT measurement reports and generates statistical report of multiple UUTs.

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	Full Scale	Resolution	**Accuracy** (% of full scale)
20 Ω	20 Ω	0.001 Ω	0.05%
200 Ω	200 Ω	0.01 Ω	0.025%
2 kΩ	2 kΩ	0.1 Ω	0.025%
20 kΩ	20 kΩ	1 Ω	0.05%
200 kΩ	200 kΩ	10 Ω	0.5%
2 MΩ	2 MΩ	100 Ω	1%
Diode	1.1 VDC	0.001 VDC	0.5%

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

Customer's power supply needs to be isolated with a level of 4.0 to 6.5 VDC at less than 550 mA.

Space Electronics LLC – 81 Fuller Way – Berlin, CT 06037 – USA
Phone: +1 860 829 0001 – Fax: +1 860 829 0005 – Email: sales@space-electronics.com
Website : www.space-electronics.com