

Igniter Circuit Testers

102-SQB-RAK



Description

Designed for testing two squibs and other electrically detonated ordnance, Raptor Scientific's 102-SQB-RAK squib tester can safely test diodes and measure resistances with great accuracy. This ICT is a combination 19-inch rackmount/benchtop unit.

Safety Features

- Fail-safe modules limit 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. Sealed, tamperproof, fail-safe modules guarantee 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 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.

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

- Dual rear-mounted UUT channels allow for sequential measurement of two circuit paths without reconnecting cables.
- 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 k Ω	2 k Ω	0.1 Ω	0.025%
20 k Ω	20 k Ω	1 Ω	0.05%
200 k Ω	200 k Ω	10 Ω	0.5%
2 M Ω	2 M Ω	100 Ω	1%
Diode	2.0 VDC	0.001 VDC	0.5%

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