Digibridge

Series 1692 RLC Tester

Cost Effective, Accurate, Impedance Measurements

USES:

- Meters used for impedance measurements (inductance, capacitance, and resistance) to characterize the performance of a variety of electrical components and materials.
- Test Resistors, Capacitors, Inductors or any type of passive component
- Testing Electronic Components

FEATURES:

- Accuracy of 0.05% for RLC measurements
- Five Test Frequencies of 100Hz, 120Hz, lkHz, 10kHz and 100kHz
- Five Digit Resolution for RLC, Four Digit Resolution for D and Q
- Two AC Test Voltages - 0.3V or 1Vrms
- 2, 4 or 8 Measurements per second
- IEEE-488 Bus and Component Handler Option

Introduction

The QuadTech 1692 Digibridge is an RLC passive component tester that gives you the most cost-effective alternative to high-priced testers. It's designed for the demanding applications in production testing, incoming inspection, component design and evaluation. It provides superior testing performance and capability at the lowest cost.

Description

The 1692 is a sophisticated, microprocessor-controlled tester that brings new levels of flexibility, simplicity and accuracy to RLC measurement. It's testing automation at its best with a range of programmable test frequencies and test voltages, as well as automatic limit comparison, automatic parameter selection, remote programmability, automatic binning and automatic zeroing.

The display facilitates visual acquisition of test data and eliminates costly guesswork and errors.The 1692 provides a powerful combination of features designed to maximize productivity in production testing applications.

- 0.05% Accuracy for RLC measurements; 0.0003 for D and Q measurements.
- Five selectable test frequencies: 100Hz, 120Hz, lkHz, 10kHz and 100kHz for greater versatility in component testing.• Choice of two commonly specified AC test voltages.
- Three keyboard-selectable test speeds; 2,4 or 8 measurements per second complements automatic handling equipment to maximize throughput.
- A choice of two measurement modes; Triggered and Continuous with averaging available in each ensures measurement flexibility.
- Wide choice of measurement parameters allow you to work with familiar units.
- A full, five-digit LED display for RLC measurements and a four-digit readout for D and Q testing, simultaneously display both test results for each measurement, automatically
- Guarded Kelvin measurement techniques protect measurement integrity.
- Automatic limit comparison and binning ensure fast, mistake-proof sorting of components.
- Optional IEEE-488 Bus and Handler Interface enable remote programming and allow the addition of a component handler to optimize throughput.

QuadTech
formerly GenRad Instruments
The Safest Choice™
ISO 9001 Certified

For more detailed specifications, visit
www.quadtech.com

For more information about special purchase, rent & lease options, call

1-800-253-1230
Fax 1-978-461-4295
Intl. 1-978-461-2100

Product Specifications

1692 Digibridge RLC Features

Measurement Parameters: R/Q, L/Q, C/R, C/D (series or parallel)

Test Frequencies: 100Hz, 120Hz, lkHz,10kHz and 100kHz.
Accuracy ±0.01%.

Applied Voltage: 0.3V to 1.0rmsV maximum

Measurement Speed: 2, 4 or 8 measurements/second for Slow, Medium or Fast.

Measurement Mode: Continuous, Triggered (single, or 1 to 10 measurements averaged.

Display Format: Dual Display featuring 5 full digit LED for RLC and 4 full digit LED for DQR
Bin Number, Delta RLC, Delta %,Value
Automatically positioned decimal points and minus signs where appropriate.
Individual LED indicators for parameters, units, and measurement conditions.
GO/NO GO lights

Bias: Internal 2.0VDC External up to 60VDC

Automatic Functions: Auto ranging with manual hold
Auto parameter (RLC) with manual selection

Binning: • Eight pass bins for RLC • Two fail bins, RLC and DQR

Interfaces: IEEE-488/Handler Interface option

Ranges:

Parameter	RLC	DQR
R/Q	0.00001Ω to 99999MΩ	0.0001 to 9999
L/Q	0.00001mH to 99999H	0.0001 to 9999
C/D	0.00001pF to 99999mF	0.0001 to 9999
C/R	0.00001nF to 99999mF	0.0001Ω to 9999kΩ

Accuracy: Basic RLC ±0.05%.
Basic DQ ±0.0003

Zeroing: Open and short circuit compensation.

General Features:
- Charged Capacitor Protection (1 Joule)
- Constant Voltage Mode.
- Keyboard Lock
- Store Test Conditions

Dimensions: (w x h x d): 14.8 x 4.4 x 113.5in (375 x 112 x 343mm)

Weight: 10 lbs. (4.5kg) net, 15.1.lbs. (6.83kg) shipping.

Accessories Supplied:
- Power Cable
- Test Fixture (Built-in)
- Axial Lead Adapters
- Instruction Manual

Enviromental: Operating: 0°C to +50°C
Storage: -40°C to +75°C
Humidity: < 85%

Power:
- 90-250V AC
- 50 - 60 Hz
- 60W max

Ordering Information

1692-9700 1692 RLC Tester

Includes:

4200-0300	AC Power Cable
1657-5995	Axial Lead Adapters
1692-0120	Instruction Manual
No P/N	Calibration Certificate Traceable to NIST

Optional Accessories:

	Calibration Data
1658-9620	IEEE/Handler Interface
1689-9601	BNC Adapter Box
1689-9602	BNC to BNC Extender Cable
1657-9600	Banana/Alligator Clip Extender Cable
1689-9604	Calibration Kit
7000-03	Kelvin Clip Extender Cable
7000-05	Chip Component Tweezers
1689-9600	Remote Test Fixture
1689-9605	GO/NO GO Remote Test Fixture
1688-9600	874 Connector Extender Cable

For more detailed specifications, visit www.quadtech.com
For more information about special purchase, rent & lease options, call
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