



General Description:

The Model 6010Q is an enhanced Direct-Current-Comparator bridge operating in room temperature air which allows two resistors to be compared with an accuracy of one (1) part in 10^{-8} . It is specifically designed to compare the QHR device directly to a 1000 ohm resistor. The bridge can also be used to measure the field dependence of R_{xx} and R_{yy} , to make precision measurements of R_{xx} and to measure the contact resistance of the QHR device. It has the ability to make all the measurements necessary to ensure the accuracy of the QHR resistor.

A low thermal matrix scanner (Model 4210A) can be combined with the Model 6010Q to the build up or down from the 1000 ohm resistor to establish values for 0.1, 1, 10, 100, 1K and 10K ohm primary resistors with a very high level of accuracy. The Model 6010Q is designed for flexibility and ease of use and is perfectly suited for stand-alone use or with Measurements International's Windows® based Software with real time uncertainty analysis, history logging, and graphing and regression analysis.

Specifications:

Range	Accuracy(95%)
0.1 to 1 Ohm	<0.02 ppm
1 to 10 Ohm	<0.02 ppm
10 to 100 Ohm	<0.02 ppm
100 to 1K Ohm	<0.02 ppm
1K to 13K Ohm	<0.02 ppm
Maximum Ratio	13:1
Resolution	0.001 ppm
Linearity	<0.01 ppm
Test Currents	1 μ A to 150mA
Automatic DC Current Reversal	4 to 1000 Seconds
Insulation Resistance	>10 ¹¹ , typically 10 ¹²
Operating Environment	8 to 30°C, 10 to 80% RH
Warranty	1 Year Parts & Labor

Dimensions:

270 x 450 x 380 mm

Weight:

27 kg

Shipping Weight:

30 kg

Accessories:

SPSCW XX YY 4
4210A

Operating Power:

100, 120, 220, 240V - 50/60 Hz

Distributed By:

How to Order:

Model: 6010Q-Bridge