



Model 5156DR Electrometer Calibration Standard

Keithley 5156 Direct Replacement

Calibrate Picoammeters, Electrometers,
Source & Femptoamp Meters

NIST Traceable

Custom Values Available

Description:

With the Keithley model 5156 being discontinued in 2004, there has been a continued interest in supporting a variety of high resistance - low current meters including models 6430, 6485, 6487, 6514, 6517A and many more. The demand for a direct, drop in replacement has steadily increased and has driven the development of the new model 5156DR.

The model 5156DR is smaller in size and offers improved specifications as a result of improvements in commercially available high resistance technology combined with additional research, unique design & development efforts and extensive testing.

The model 5156DR can be ordered directly online and is usually in stock. Each unit is delivered with a certificate of conformance and instruction manual. NIST traceable certificate can be ordered separately.

Custom values and stand alone resistor standards are available upon request.

5155DR Series - 10MΩ to 10TΩ Standard Air Resistors (1TΩ & 10TΩ values for Model 6430 Calibration)

Specifications:

Nominal Value	Characterization Accuracy - PPM	Temperature Coefficient PPM/°C	Voltage Coefficient PPM/Volt	Initial Tolerance ± Percent	Stability PPM/Year Maximum
100M	200	< 50	< 1	1	100
1G	300	< 50	< 1	1	100
10G	400	< 50	< 1	1	200
100G	500	< 150	< 1	1	300
1nF	1000	< 120	< 5	5	1000
100nF	1000	< 120	< 5	5	1000

**Specifications subject to change without notice*

General:

Data Port: For downloading of 5156DR characterized data to 6517 Electrometer

Maximum Input Voltage: 200 Volts Peak

Connectors: One female 3 lug triax connector, six female BNC connectors, one five way binding post (shield), one five way binding post (chassis ground), mini circular connector for calibration data entry.

Environment:

Operating: 23°C ± 3°C, 30-60% RH non-condensing
Temperature Stabilization: 4 hours

Physical:

Maximum Overall Dimensions: Metric 153mm (H) x 121mm (W) x 76mm (D)
 Imperial 6" (H) x 4.75" (W) x 3" (D)

Maximum Shipping Weight: Metric 2.75 kg
 Imperial 1.25 lbs

Accessories:

5156DR/ACS - Accessory Standard Kit (BNC, CF, DTC, LTC, DBA, LLBC, RBC, BBC)

Ordering Information:

Part/Model Number	Description
5156DR	Electrometer Calibration Standard
5156DR/BNC	BNC Shorting Cap
5156DR/CF	Charge Filter
5156DR/DTC	3" Data Transfer Cable
5156DR/LTC	3' Lug Triax Cable
5156DR/DBA	BNC to Dual Banana Adapter
5156DR/LLBC	3' Low Loss BNC Cable
5156DR/RBC	3' Red (Guard) Banana Cable
5156DR/BBC	3' Black (Shield) Banana Cable
5156DR/TMFB	3 Lug Triax Male to BNC Female Adaptor
5156DR/TMMT	3 Lug Triax Male to 3 Lug Triax Male Adaptor
5156DR/NIST	NIST Traceable Calibration Certificate
5156/ACC	Accredited Calibration Certificate
5156DR/Manual	Spare Operators Manual

Revision: 5156DR_110817