



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 a NIST traceable certificate can be ordered separately.

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

Accessories available: NIST traceable certificate, Charge Filter, 7078.TRX-3 3-Lug Triax Cable, 8501-l Dala Transfer Cable

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 | < 50 | < 1 | 1 | 300 |
| 1nF | 1000 | < 50 | < 5 | 1 | 300 |
| 10nF | 1000 | < 50 | < 5 | 1 | 300 |

**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 3.Lug Triax for meter, Six BNC's for Calibrator connection

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/ACC - Accessory Kit (See Below)

5155DR/1T - 1TΩ Standard Air Resistor

5155DR/10T - 10TΩ Standard Air Resistor

Ordering Information:

| Part/Model Number | Description |
|-------------------|--|
| 5156DR | Electrometer Calibration Standard |
| 5156DR/CF | Charge Filter |
| 5156DR/LTC | 3' Lug Triax Cable |
| 5156DR/DTC | 3" Data Transfer Cable |
| 5156DR/DBA | BNC to Dual Banana Adapter |
| 5156DR/LLC | 3' Low Loss BNC Cable |
| 5156DR/RBC | 3' Red (Guard) Banana Cable |
| 5156DR/BBC | 3' Black (Shield) Banana Cable |
| 5156DR/NIST | NIST Traceable Calibration Certificate |
| 5156/ACC | Accredited Calibration Certificate |
| 5156DR/Manual | Operators Manual |

Revision: 5156DR_100512