

2755 Portable Wheatstone Bridge



275597

182×226×128mm 2kg
(7-1/4×9×4-3/4" 4.4lbs)

Model 2755 measures resistances from 1Ω to 10 MΩ by operation of dials and switches. Batteries and a galvanometer are self-contained. The front control panel is provided with power and galvanometer circuit selectors, one ratio arm dial, and four measuring arm dials.

Model 2755 is also equipped with a Murray and Varley Loop Tester for convenient location of line faults such as "shorts" and "grounds" in power, telephone, telegraph, and signal cables.

- No auxiliary attachment required
- Galvanometer with a built-in protection circuit
- Compact, lightweight (2 kg)
- Built-in Murray & Varley loop tester

SPECIFICATIONS

Measuring Range: 1.000 Ω to 10.00 MΩ.

Measuring Arms: 1 Ω × 10 + 10 Ω × 10 + 100 Ω × 10 + 1,000 Ω × 10 (min. one step: 1 Ω).

Ratio Arms (Multiplier): × 0.001, × 0.01, × 0.1, × 1, × 10, × 100, × 1,000 (M10, M100, M1000 ... Murray & Varley loop testing).

Accuracy: ±0.1% of reading on 100 Ω to 100 kΩ range, ±0.3% of reading on 10 Ω to 1 MΩ range, ±0.6% of reading on 1 Ω to 10 MΩ range.

Temperature Coefficient of Resistance Elements: ±5 × 10⁻⁵ /°C at ambient temperature of 5 to 35°C (41 to 95°F), ±2 × 10⁻⁵ /°C at ambient temperature 20 to 35° (68 to 95°F).

Galvanometer: Sensitivity ... 0.9 μA/div., internal resistance ... Approx. 150 Ω, external critical damping resistance ... Approx. 800 Ω, period ... within 1.5 seconds.

Power Source: Three 1.5 V batteries (built-in).

Operating Temperature Range: 5 to 35°C (41 to 95°F).

Humidity Range: 85% max., relative humidity.

Outer Case: ABS resin.

Accessory supplied at no extra cost: Carrying case.

2769 Portable Double Bridge



276910

182×226×128mm 2.6kg
(7-1/4×9×4-3/4" 5.7lbs)

Model 2769 is a compact, portable Kelvin double bridge designed for measuring low resistance from 0.1 mΩ to 110 Ω with four multiplication plugs and one measuring dial. It has built-in standard resistors, bridge power source and high-sensitivity taut-band suspension system electronic DC galvanometer.

SPECIFICATIONS

Measuring Range: 0.1 mΩ* to 110Ω.

Measuring Dial: 1.00 to 11.00 Ω at × 1.

Multipliers: × 0.0001*, × 0.001, × 0.01, × 0.1, × 1, × 10 (plug-in system).

Min. Division: 0.005 mΩ at × 0.0001*, 0.05 mΩ at × 0.001, 0.5 mΩ at × 0.01, 5 mΩ at × 0.1, 50 mΩ at × 1, 0.5Ω at × 10.

Accuracy: ±(0.05 Ω × multiplier + 0.01 mΩ) at temperature range of 5 to 35°C and humidity range of less than 85%.

Current Rating: 10A at × 0.0001*(0.01Ω), 3A at × 0.001 (0.1Ω), 1A at × 0.01 (1Ω), 0.3A at × 0.1 (10Ω), 0.1A at × 1 (100Ω), 0.01A at × 10 (1,000Ω).

Galvanometer: Built-in electronic DC galvanometer, voltage sensitivity ... approx. 20 μV/div. sensitivity changeover;

G₀ ... (input resistance: approx. 11 kΩ).

G₁ ... approx. 1/11 of G₀ sensitivity.

G₂ ... approx. 1/110 of G₀ sensitivity.

power source; one 9 V battery (JIS 6F22),

battery life; approx. 300 hours.

Operating Temperature Range: 5 to 35°C (41 to 95°F).

Humidity Range: Less than 85% relative humidity.

Bridge Power Source: Two 1.5 V batteries (JIS R20P), External power source is also usable. Terminals for an external battery are provided.

***Note:** Standard Resistor (Model 2771) is required for measurement on 0.1 to 1.1mΩ range at 0.0001 multiplier.

Accessory supplied at no extra cost: Carrying case.

Optional Accessories: 2771 standard resistor, 2753 measuring cords (Page 8), 2754 clamp device (Page 8).