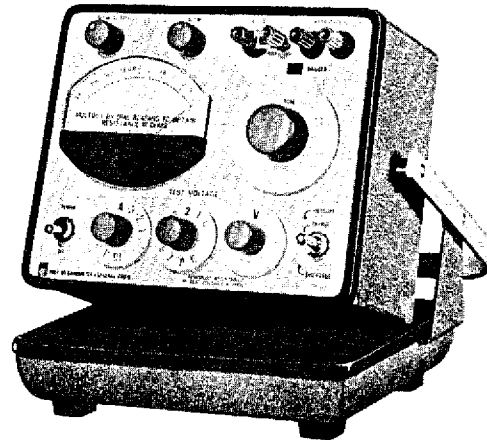


- Type 1863** ■ 5 test voltages: 50 to 500 V
 ■ 50 kΩ to 20 TΩ ($2 \times 10^{13} \Omega$)
 ■ economical, simple operation
 ■ direct reading, safe, stable



- Type 1864** ■ 200 test voltages: 10 to 1090 V
 ■ 50 kΩ to 200 TΩ ($2 \times 10^{14} \Omega$)
 ■ direct reading, safe, stable
 ■ simple operation

If one of these GR megohmmeters doesn't exactly suit your high-resistance-measurement needs, the other one should. Although similar in appearance and accuracy, their operating ranges differ to match differing needs in the laboratory and production area.

The Choice for Production and Inspection

The Type 1863 Megohmmeter will measure resistance at any of five common test voltages up to 500 V, has fewer controls, and is the lower priced model. It is, therefore, the best selection when several test stations are to be equipped, when the operators are inexperienced, or when specifications call for standard insulation-testing voltages.

The Choice for Laboratory Investigations

The 1864 is the more flexible of the two instruments. The test voltage can be set to any value from 10 to 109 volts in 1-volt steps and to 1090 volts in 10-volt steps.

Thus, the 1864 can be set to any common, or uncommon, test voltage for ceramic, mica, or paper capacitors, or other devices. The reverse resistance of rectifiers can be readily measured; the low test voltages available are especially useful in measuring solid-state diodes. An additional range permits measurements up to 2×10^{14} ohms (200 TΩ).

Both instruments are easy to use with direct-reading meter indication and lighted range switch that shows the multiplier for each range and voltage. The maximum current possible at the terminals is limited to a safe 5 milliamperes and a panel light near the terminals warns when voltage is present. Stable power supplies and feedback voltmeter circuit minimize drift and time-wasting adjustments. Guard and ground terminals permit measurement of grounded or ungrounded two- or three-terminal resistors. The instruments are supplied for rack mounting or in a convenient, portable flip-tilt case that is a stand for the meter in use and protects it in transit and storage.

specifications

Voltage and Resistance Range:

Voltage	R_{min} Full Scale	10% of Scale	R_{max} 2 1/2% of Scale	Useful Ranges
Type 1863				
50, 100 V	50 kΩ	500 GΩ	2 TΩ	7
200, 250, 500 V	500 kΩ	5 TΩ	20 TΩ	7
Type 1864				
10 to 50 V	50 kΩ	500 GΩ	2 TΩ*	7*
50 to 100 V	200 kΩ	5 TΩ	20 TΩ	8
100 to 500 V	500 kΩ	5 TΩ	20 TΩ*	7*
500 to 1090 V	5 MΩ	50 TΩ	200 TΩ	8

* Recommended limit.

Resistance Accuracy: $\pm 2(\text{meter reading} + 1)\%$ on lowest 5 ranges (min reading is 0.5). For higher ranges add:

	sixth	seventh	eighth
1863	2%	4%	—
1864	2%	3%	5%

Voltage Accuracy (across unknown): $\pm 2\%$.

Short-Circuit Current: 5 mA approx.

Power Required: 100 to 125 or 200 to 250 V, 50 to 400 Hz, 13 W.

Accessories Supplied: Mounting hardware with rack models.

Mounting: Flip-tilt case and rack mount.

Dimensions (width x height x depth): Portable, 9 5/8 x 10 x 6 3/4 in.

(245 x 255 x 175 mm); rack, 19 x 7 x 4 5/8 in. (485 x 180 x 120 mm).

Net Weight: Portable, 9 1/2 lb (4.4 kg); rack, 11 lb (5 kg).

Shipping Weight (est): 14 lb (6.5 kg).

Catalog Number	Description
1863-9700	1863 Megohmmeter Portable Model Rack Model
1863-9701	
1864-9700	1864 Megohmmeter Portable Model Rack Model
1864-9701	