

## 221 Digital Milliohmeter

### FEATURES

- Compact
- Portable
- Easy to Operate
- Fast Measurements of Transformers
- 3 Year Warranty

### DESCRIPTION

The BROMAN Model 221 Digital Milliohmeter is designed for rapid and accurate measurement of low resistance values ranging from ohms down to microhms. The instrument is particularly effective in measuring the resistance of large power transformers which, because of their high inductance, tend to have a long settling time when measured with conventional instruments.

The Model 221 Digital Milliohmeter provides an accuracy and permanence of calibration approaching that of the traditional Kelvin bridge, but without the necessity of time consuming balancing. The unknown resistance is displayed immediately on a digital meter display. The instrument operates on the fundamental principle of passing an accurately known DC current through the test subject and accurately measuring the resultant voltage drop. The current is established by means of precision shunts used as references and voltage drop across the device under test is measured with the digital millivoltmeter. An elaborate surge suppressor absorbs the transients associated with transformer testing.



### SPECIFICATIONS

|  | RANGE | TEST CURRENT<br>(A DC) | ACCURACY<br>± (% of reading + LSD) |
|--|-------|------------------------|------------------------------------|
|  | 200 Ω | 0.01                   | 0.2 % +5                           |
|  | 20 Ω  | 0.1                    | 0.2 % +5                           |
|  | 2 Ω   | 1                      | 0.2% + 5                           |

|                              |                                                                                           |   |          |
|------------------------------|-------------------------------------------------------------------------------------------|---|----------|
|                              | 200 m $\Omega$                                                                            | 5 | 0.2% + 5 |
|                              | 20 m $\Omega$                                                                             | 5 | 0.5% + 5 |
|                              | 2 m $\Omega$                                                                              | 5 | 0.5% + 5 |
| <b>Power:</b>                | 120 V AC, 60 Hz, 3 A                                                                      |   |          |
| <b>Display:</b>              | 0.56 inch LED                                                                             |   |          |
| <b>Controls:</b>             | <b>ON/OFF</b> rocker switch; <b>RANGE</b> selector switch; amplifier <b>ZERO</b> trimpot. |   |          |
| <b>Terminals:</b>            | 5-way binding posts designated C1, P1, P2, C2                                             |   |          |
| <b>Dimensions:</b>           | 12 inch (w) x 7 inch (h) x 15 inch (d)                                                    |   |          |
| <b>Weight:</b>               | 15 lbs.                                                                                   |   |          |
| <b>Optional Accessories:</b> | Test leads supplied to customer's specification                                           |   |          |

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