

# **Advanced Powder Fixture PRF-930**

**Data Sheet** 

### For measurement of powders and granulated materials

Acrylic frame fixture with opposing power and concentric ring measurement plates for resistance measurement of small volumes of powder and granulated materials. Correction Factor (CF) is used to convert bulk resistance measurement to volume resistivity in ohm-cm.





## **Data Sheet**

| Specifications for the PRF-930 Advanced Powder Fixture |  |
|--|--|
| Upper Resistance Limit                                 | Nominal 1.0x10 <sup>14</sup> ohms ±20% @ 500 Volts, 71°F (21.7°C), 18% Rh, Clean,<br>empty fixture. Note that most resistance measure-ments are made at 100 volts and<br>below.  |
| Material Capacity                                      | Approximately 1.0 Tablespoon (US) (15 cm <sup>3</sup> )  |
| Correction Factor ( <b>CF</b> )<br>to Ohm-cm           | Based on: $\rho = R \frac{A}{d}$   |
|  | Where,   |
|  | $\rho$ = Volume Resistivity in ohm-cm<br>R = Resistance obtained from the material measurement in ohms<br>A = Area of the fixture's center plate in cm <sup>2</sup><br>d = Distance in cm between the measurement and power plates.<br>and,                        |
|  | $ \rho = R (CF) $  |
|  | Where,   |
|  | ho = Volume Resistivity in ohm-cm<br>R = Resistance obtained from the material measurement in ohms<br>CF = Correction Factor (Area [A] of the fixture's center plate in cm <sup>2</sup> divided<br>by Distance [d] in cm between the measurement and power plates. |
|  | Typical <b>CF</b> Range 4.6 cm to 4.9 cm, Typical 4.75 cm  |
| Approximate<br>Fixture Dimensions                      | Note: Dimensions vary slightly from fixture to fixture as they are hand polished and assembled. Temperature and humidity will affect fixture dimensions. Approximate dimensions as follows:  |
|  | W 2.36 in (60 mm) x D 1.25 in (32 mm) x H 2.25 in (57 mm)  |
| Approximate<br>Fixture Weight                          | 12.35 oz (250 gm)  |

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