

Model 1804

RF CALIBRATION AND MEASUREMENT PRODUCTS

- Traceable to primary voltage and resistance standards
- Bias either 100 or 200 ohm mounts
- LEDs and Analog Meter are conveniently located on the front panel
- Economical, easy to use, compact and light-weight
- One-year warranty
- Optional A2LA Accredited ISO/IEC 17025:1999 Compliant Calibration

Single Type IV RF Power Meter

The Model 1804 Single Type IV RF Power Meter is designed for use with thermistor elements and an external DVM to measure high frequency power, microwave power and insertion loss. It can also function as a standard for the calibration of RF detectors, RF voltmeters, and thermistor elements (mounts) manufactured by TEGAM, Weinschel, and Agilent (HP). Mounts easily interface to the 1804's universal front panel binding post connection. Calibration of temperature-compensated mounts can be performed by adding the TEGAM Model 1820 RF Mount Heater.

The exclusive use of 100 % DC substituted power eliminates the effect of AC components on the bridge circuit which has been shown to introduce a substantial error in the substituted power due to the short-term time constant of some bolometer elements. Substituted DC power levels

ranging from 0.01mW to 30mW can be measured to within $\pm 0.003\%$, which makes this an ideal instrument for insertion loss measurements. Regardless of the application, all measurements can be made traceable to primary voltage and resistance standards.

The Model 1804 Type IV RF Power Meter is designed to bias either 100 or 200 ohm mounts and is thus compatible with Aligent (HP) 478A, 486A and 8478A thermistor mounts (when used with cable P/N 138-652) and all TEGAM Thermistor Power Standards (refer to applicable data sheets for mount specifications). A front panel switch selects the operating resistance for the power meter. Each power meter has a bolometer current meter and a fault LED indicator that illuminates under any condition preventing loop balance. Terminals are provided for an external DVM, negative bolometer, and voltage sense.



Prices and specifications subject to change without notice.

TEGAM®

YOUR GLOBAL SOURCE FOR TEST
AND MEASUREMENT SOLUTIONS

Model 1804

S I N G L E T Y P E I V R F P O W E R M E T E R

Specifications

Power Range	0.01 mW to 30 mW
Substitution Bridge Accuracy	±0.003 %
Temperature Range	
Operating	+10 °C to +40 °C (+50 °F to +104 °F)
Storage	-40 °C to +75 °C (-40 °F to +167 °F)
Connectors	Binding Post, standard 0.75 in. spacing for Banana plugs
Power Requirements	105-125 or 210-250 VAC, 47 to 420 Hz, 12 Watts (factory optional)
Weight	2.82 kg (6.20 lb)
Physical Dimension	
Height	85.61 mm (3.37 in)
Width	250.00 mm (9.84 in)
Depth	260.00 mm (10.24 in)
Rack Mounting	The Model 1804 can be shelf mounted in any cabinet or rack designed according to EIA RS-310 and MIL-STD-189
Included Accessories	
Mount Bias Cable	P/N 138-526
Power Cord	P/N 068-21
Manual	P/N 1804-900-01CD
Optional Accessories	
Agilent (HP) Thermistor Mount Cable	P/N 138-652
Z540 Compliant Calibration with Certificate and Data for 1804	P/N OPT-Z540
A2LA Accredited ISO/IEC 17025:1999 Compliant Calibration for 1804	P/N OPT-A2LA



10 TEGAM WAY • GENEVA, OHIO 44041
440-466-6100 • FAX 440-466-6110
www.tegam.com • e-mail: sales@tegam.com