

Model 1107-7**18.0 to 26.5 GHz****Model 1107-8****26.5 to 40.0 GHz****WAVEGUIDE POWER TRANSFER
STANDARD (Terminating & Feedthrough)****NIST Calibrated or Traceable**

The Model 1107-7 Temperature Stabilized RF Power Standard enables precise measurement of microwave power in the 18 to 26.5 GHz frequency range while Model 1107-8 covers the 26.5 to 40 GHz frequency range. These units are rugged, highly accurate and stable with time and temperature.

These consists of a 3 dB coupler with a thermistor mount on the coupler's side arm, and a removable termination on the coupler's main arm. With the termination removed, the 1107-7 or 1107-8 becomes a feedthrough transfer standard, which is ideal for the transfer of calibration factors to terminating power standards or power sensors. With the termination attached, the 1107-7 becomes a terminating transfer standard.

Each power standard is supplied with calibration data traceable to NIST ("measure" calibration factor, K¹). Cal Factor data ("monitor" calibration factor, K²) is also supplied for use when the unit is used as a feedthrough standard.

These models are designed for use with a dc self-balancing bridge such as the TEGAM Model 1806 Dual NIST Type IV Power Meter.

SPECIFICATIONS**FREQUENCY RANGE:**

Model 1107-7	18 to 26.5 GHz
Model 1107-8	26.5 to 40.0 GHz

MAXIMUM EQUIVALENT SOURCE SWR: 1.20**RESISTANCE WHEN BIASED:** 200 Ω**RESISTANCE TEMPERATURE COEFFICIENT:**
Negative**DC BIAS POWER:** 12.0 to 20.0 mW**POWER MEASUREMENT RANGE:** Up to 20 mW**CALIBRATION:** Frequency(s): Individual calibration traceable to NIST supplied at:

Model 1107-7	18.0, 19.0, 20.0, 21.0, 22.0, 23.0, 24.0, 25.0, 26.0, 26.5 GHz
Model 1107-8	26.5, 30.0, 33.0, 36.5, 40.0 GHz

Calibration at NIST (K¹ only) and other frequencies are available at additional cost.

CALIBRATION FACTOR ACCURACY: Within limits stated by NIST, typically 1.0 - 1.5%.**CALIBRATION FACTOR STABILITY:** Better than 0.5% per year.**CALIBRATION FACTOR POWER LEVEL DEPENDENCE:** < 0.1% change from 1 to 10 mW negligible to maximum useful limit.**CONNECTORS:****Model 1107-7:** Waveguide, WR-42 Mount outputs are Binding Post, standard 0.75" spacing for Banana plugs.**Model 1107-8:** Waveguide, WR-28. Mount outputs are Binding Post, standard 0.75" spacing for Banana plugs.**TEMPERATURE RANGE:**

Operating:	+12°C to +40°C
Non-operating:	-55°C to +75°C

WEIGHT: Minimum net, 5.1 kg (11 lbs, 3 oz)**PHYSICAL DIMENSIONS:** 285 mm (11.2 in) high, 391 mm (15.4 in) long, 239 mm (9.4 in) wide.