RF CALIBRATION AND MEASUREMENT INSTRUMENTS



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250 kHz to 1000 MHz High Power Transfer Standard



- Calibrate High Power RF
 Sensing devices from 250 kHz to 1000 MHz
- 2.5 to 250 W dynamic range (+34 to +54 dBm)
- Compatible with TEGAM High Power RF Calibration System

TEGAM Temperature Stabilized Coaxial RF Power Transfer Standards enable the precise measurement of high power (+34 to +54 dBm) microwave power in the 250 kHz to 1000 MHz frequency range.

The TEGAM 2601A working standard is constructed of a directional coupler paired with a 1505A thermistor power standard. The design has the coupler and 1505A mounted on an aluminum heat sink to reduce changes in coupling factor attributable to heating. These standards are highly accurate and stable with time and temperature. They are ideal for use as standards for the transfer of calibration factors to other high power RF standards and power sensors.

The calibration of these standards is traceable to the International System of Units (SI) through the National Institute of Standards and Technology (NIST) or other recognized National Metrology Institutes.

These RF Power Standards work with TEGAM's 1830A RF Power Meter

System configurations employing instruments of this accuracy typically achieve calibration factor transfer results better than primary standards laboratories.

The Model 2601A is a feedthrough thermistor standard used for the calibration of Watt Meters as well as other high power RF power sensing sensors.

The Model 2601 A features a Type N female connector.

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Specifications	
Frequency Range	250 kHz to 1000 MHz
Connector Type	N
Max Power	+54 dBm, 250 W
Linearity	<0.25% from +44 to +54 dBm (25 to 250 W)
Typical Usable Range	+34 to +54 dBm (2.5 to 250 W) (Depends on noise floor of instrument)
Calibration Factor Drift	<0.5% per year
Calibration Points	250 kHz, 300 kHz, 460 kHz, 500 kHz, 1 MHz, 1.25 MHz, 3 MHz, 5 MHz 10 MHZ, 13.56 MHz, 20 MHZ, 27.12 MHz, 30 MHz, 40.68 MHz 50 MHZ to 90 MHz in 10 MHz steps 100 MHZ to 1000 MHz in 50 MHz steps
Calibration Factor Uncertainty	1%
Calibration Factor Temperature Coefficient	< 18 °C or > 24 °C, add 0.6% / °C
Thermistor DC Bias Power	Approximately 30 to 80 mW (nominal)
Thermistor Resistance at Bias	200 Ohms
Max VSWR	1.15:1
Typical Insertion Loss	0.5 dB
Nominal Coupling Factor	43 dB
Operating Temperature Range	+15° to +30° C
Physical Dimensions: Height	176 mm (6.93 in)
Width	266 mm (10.47 in)
Depth	128 mm (5.04 in)
Weight	5 kg (11 lbs)
Warranty	1-year Parts and Workmanship