

RF CALIBRATION AND MEASUREMENT INSTRUMENTS



700 to 3500 MHz High Power Transfer Standard



- Calibrate High Power RF Sensing devices from 700 to 3500 MHz
- 2.5 to 250 W dynamic range (+34 to +54 dBm)
- Compatible with TEGAM High Power RF Calibration System Compatible

TEGAM Temperature Stabilized Coaxial RF Power Transfer Standards enable the precise measurement of high power (+34 to +54 dBm) microwave power in the 700 to 3500 MHz frequency range.

The TEGAM 2602A working standards 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 2602A is a feedthrough thermistor standard used for the calibration of Watt Meters as well as other high power RF power sensing sensors.

The Model 2602A features a Type N female connector.



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Specifications	
Frequency Range	700 to 3500 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	700 to 3500 MHz in 100 MHz steps, 2450 MHz
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	1.2:1
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

