250 W RF High Power Precision Calorimeter

- Calibrate High Power RF Sensing devices up to 250 W
  - Working standards: TEGAM 2601A, 2602A
  - Through devices: Bird Wattmeters, 402X
  - R&S Sensors, R&S NAP and NRT Sensors
- 60 Hz to 3000 MHz Frequency Range
- National Lab Traceable through an AC Power Standard

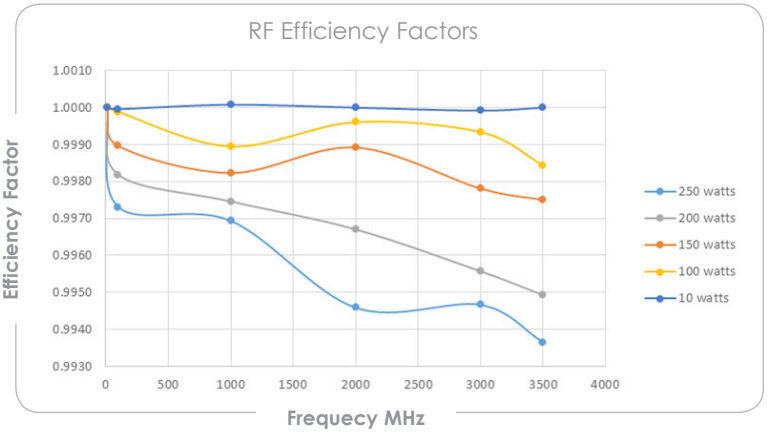
The TEGAM model 1314 is a precision calorimeter that is capable of providing highly accurate RF power measurements up to 250 W in the 60 Hz to 3000 MHz frequency range.

The TEGAM 1314 combines a colorimeter and a chiller which can precisely measure input power in the form of RF energy known as a calorie. A calorie is a defined as the amount of energy in the form of heat to raise the temperature of a certain mass of liquid by a given amount. By accurately measuring temperature and mass we can determine the amount of heat and therefore, the amount of energy applied to the liquid. The TEGAM 1314 accurately measures both the temperature rise and the mass of the liquid.

The TEGAM 1314 can be configured to self-calibrate with National Lab traceability through an AC Power standard, it can also be configured to calibrate working standards, through devices, and terminating devices. The TEGAM 1314 can be operated manually or it can be operated automatically; TEGAM offers a fully functional software suite that allows for self-calibration of the 1314 as well as calibration of working standards, through devices, and terminating devices.

Performance Graph

1314



General Specifications	
Frequency Range	60 Hz to 3000 MHz
Connector Type	N
Max Power	250 W
Typical Usable Range	+10 to +250 W
Drift	Not to exceed 50% of uncertainty spec in 1 year
Uncertainty	.3 W + .3% RDG average of 5 consecutive points taken 25 seconds apart, if those points have s.d. < 0.05W
Operating Temperature Range **Operating Humidity**	+20 to +30 C 0% to 90% noncondensing
Storage Temperature Range **Storage Humidity**	-10 to +50 C 0% to 100% noncondensing