

Tech Brief

Calibration and Zeroing for High Power Sensors with Removable Attenuators

When using a Giga-tronics high power sensor with external attenuator, Giga-tronics power meters automatically recognize the sensor type and compensates for the attenuation factor. However, when performing the front panel calibration, be sure to **remove** the attenuator before connecting to the calibrator port.

During measurement, you do **not** need to enter an offset factor to account for the attenuator loss. The sensor frequency calibration factors automatically correct for the combined frequency response of the sensor and attenuator.

Because the sensor and attenuator are a matched set, the serial numbers of the sensor and attenuator are identical. Do not use attenuators from other high power sensors.

1. Remove the high power attenuator from the sensor.
2. Connect the sensor to be calibrated from Channel A or B to the Calibrator Output (See Figure 1).
3. Press the **[CAL/ZERO]** hard key. The meter will automatically zero and calibrate the sensor.
4. Reconnect the high power attenuator to the sensor (See Figure 2).

NOTE: There are alignment marks (arrows) on the sensor and attenuator. To reduce measurement uncertainty, align the arrows when reconnecting the attenuator to the sensor.



Figure 1: Setup for Sensor Calibration

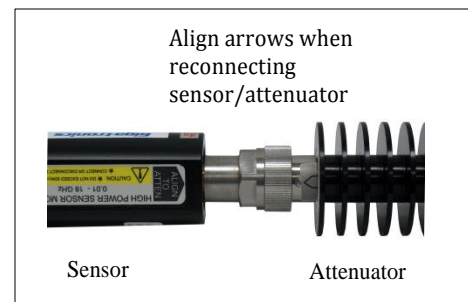


Figure 2: High Power Sensor Connection