The TEGAM Model 1830A Universal Thermistor Power Meter is the industry standard for modern power calibration systems, and must be connected to a bolometer or thermistor power sensor to operate. This cable selection guide illustrates the 6 most popular configurations of the 1830A and the cables required to complete the interface to various sensors manufactured by Weinschel, Hewlett-Packard and TEGAM.

The connection in Figure 1 is between an 1830A and a sensor with a “large” heater connector and separate binding posts for the bias voltage. Sensors with this configuration include the Model M1125(A), M1130(A), M1135(A), M1111, M1120, M1110, M1135, F1116, F1119(C), F1109, F1117A(AC), 1807A, 1107-7, and 1107-8. The required interface cables are Model CA-10-15/48 (15” or 48”) and CA-7-15/48 (15” or 48”).

The connection in Figure 2 is between an 1830A and a sensor with a “small” heater connector and separate binding posts for the bias voltage. Sensors with this configuration include Models F1125A, F1130A, F1130B, F1135A, and F1135B. The required cables are CA-11-15/48 (15” or 48”) and CA-7-15/48 (15” or 48”).
The connection in Figure 3 is between an 1830A and a sensor with a combined heater and bias interface. Sensors with this configuration include Models 1505A, 1510A, 2505A, and 2510A. For this configuration the required interface cable is CA-21-15/48 (15" or 48").

Figure 3 - Connection between 1830A and a heater/bias Combination Connector

The cable illustrated in Figure 4, CA-20-24/48 (24" or 48"), is used to interface the 1830A to an acceptable multi-function calibrator and other calibration standards for the purpose of calibrating the 1830A.

Figure 4 – Connection between 1830A and Calibration Equipment
The connection in Figure 5 is between an 1830A and a Hewlett-Packard thermistor sensor like the Model HP8478B or HP478A. For this configuration the required cable is CA-6-48.

![1830A, CA-6-48, HP 8478B or 478A](image)

*Figure 5 - Connection between 1830A and an HP Thermistor*

The connection in Figure 6 is between an 1830A and a controller, such as a laptop. The required USB interface cable is CA-14-2M.

![1830A, CA-14-2M](image)

*Figure 6 – Connection between 1830A and Controller*