

Table 1-1. Specifications (continued)

Power Reference:	Internal 50 MHz oscillator with Type N Female connector on front panel (or rear panel, Option 003 only).
Power output:	1.00 mW Factory set to $\pm 0.7\%$ traceable to the National Bureau of Standards.
Accuracy:	$\pm 1.2\%$ worst case ($\pm 0.9\%$ rss) for one year (0 to 55°C)
Response Time:	(0 to 99% of reading, five time constants.)
Range 1 (most sensitive)	<10.0 seconds
Range 2	<3.8 seconds
Range 3	<1.3 seconds
Ranges 4-10	<500 milliseconds
	Typical, measured at recorder output.
Cal Factor:	16-position switch normalizes meter reading to account for calibration factor or effective efficiency. Range 85% to 100% in 1% steps.
Cal Adjustment:	Front panel adjustment provides capability to adjust gain of meter to match power sensor in use.
Recorder Output:	Proportional to indicated power with 1 volt corresponding to full scale; 1 k Ω output impedance; BNC connector.
RF Blanking Output:	Provides a contact closure to ground when autozero mode is engaged.
Power Consumption:	100, 120, 220, or 240V +5%, -10% 100 and 120 volts, 48 to 66 Hz and 360-440 Hz 220 and 240 volts, 48 to 66 Hz 20 VA maximum
Weight:	Net, 2.7 kg (5.9 lbs)
Dimensions:	155 mm high ($6\frac{3}{32}$ inches) 130 mm wide ($5\frac{1}{8}$ inches) 279 mm deep (11 inches)

Options**Battery**

The HP 435B Power Meter, Option 001 is supplied with a rechargeable battery that provides up to 16 hours continuous operation from a full charge.

If the power meter was purchased without the battery option, it may be ordered in kit form under HP part number 00435-60012. The kit includes the battery, the battery clamp, a 6-32 by $\frac{1}{2}$ inch pan head machine screw and installation instructions.

Input-Output Options**Option 002**

A rear panel input connector is connected in parallel with the front panel input connector.

Option 003

A rear panel input connector is connected in parallel with the front panel input connector. A rear panel POWER REF OUTPUT connector replaces the standard front panel connector.

Option 004

The 1.5 meter (5 ft.) power sensor cable is not shipped with the power meter.

Accessories Supplied

The accessories supplied with the power meter are shown in Figure 1-1.

- a. The HP 11730A, 1.5 meter (5-foot) power sensor cable is used to couple the power sensor to the power meter. The 1.5 meter cable is omitted when Option 004 is ordered.
- b. The line power cable may be supplied in several configurations. Refer to the paragraph entitled "Power Cable" in Chapter 2.

**Equipment Required
But Not Supplied**

To form a complete RF power measurement system a power sensor such as the HP 8481A must be connected to the power meter via the power sensor cable.

Equipment Available

The HP 11683A Range Calibrator is recommended for performance testing, adjusting and troubleshooting the power meter. The power meter's range-to-range accuracy and auto-zero operation can easily be verified with the calibrator. It also has the capability of supplying a full-scale test signal for each range.

An extender board (HP part number 5060-0630) may be used to place the A4 assembly printed circuit board in a position that allows easy access to test points and components.

The following table lists the power sensor cable accessories and their lengths that are available for use with the power meter. Order option 004 if the standard 1.5 meter cable is not desired with a cable accessory.

Power Sensor Cable Accessory	Cable Length
HP 11730B	3.1m (10 ft)
HP 11730C	6.1m (20 ft)
HP 11730D	15.2m (50 ft)
HP 11730E	30.5m (100 ft)
HP 11730F	61.0m (200 ft)

Recommended Test Equipment

The test equipment shown in Table 1-2 is recommended for use during performance testing, adjustments and troubleshooting. To ensure optimum performance of the power meter, the specifications of a substitute instrument must equal or exceed the critical specifications shown in the table.

Safety Considerations

The power meter is a Safety Class I instrument (provided with a protective earth terminal). This instrument has been designed according to international safety standards and has been supplied in safe condition.