

# HI-1710 Microwave Measurement System

## *Patented Technology*

The HI-1710 combines the proven and reliable diode sensing technology of the Holaday Microwave Survey Meters with the digital processing techniques developed for automatic oven scanning.

## **Standard Features**

- Auto-Ranging
- Analog Bar Graph Display
- Digital Alarm Set
- RS232 Interface for Computer Control
- Serial Printer Output
- Analog Recorder Output
- Separable Probe/Pre-Amp for Calibration and Repair Simplicity
- Optional Remote Probe Zeroing



The RS232 interface allows easy adapting of the unit to computerized data acquisition in laboratory studies and semi-automatic production test systems. Digital Peak-Hold and Push Button Zeroing aid in improving testing productivity and reducing errors.

Four digital filters can be selected from the front panel giving either the “Fast” or “Slow” responses familiar to analog survey meter users, or one or two higher order filters which are adapted from automatic oven scanning techniques for faster testing.

Built in self-test sequences test meter performance at turn-on and each time the meter is zeroed. Diagnostic functions accessed from the front panel give quick indications of meter status.

## Specifications

Calibration Frequency	2450 MHz
Ranges	0-1, 0-2, 0-5, 0-10 mW/cm <sup>2</sup>
Accuracy	± 1 dB
Response Time	Filter 1            1.2 sec Filter 2            < 1 sec Filter 3            4 pole Butterworth, F=0.45Hz Filter 4            4 pole Butterworth, F=0.90Hz
Maximum Power Density	2 W/cm <sup>2</sup>
Input Power	110/220 Vac, 60/50 Hz, Switch Selectable
Probe Length	30.5cm (12")
Cable Length	2.7m (9')
Dimensions	27.9 W x 20.3 H x 16.5 D cm (11" x 8" x 6.5")

### *Product Testing*

On power-up, the HI-1710 is automatically configured for normal production testing, relieving the operator of a complicated setup operation. Simply activating the Peak-Hold button from the front panel and adding serial printer results in a formatted RF leakage report each time the ZERO pad is pressed. With the Remote Zero Option, testing and reporting is accomplished without reaching up to touch the instrument or setting down the probe for even greater operator efficiency. The Remote Zero Chamber provides a location shielded from stray RF fields by simply inserting the probe.

The separable probe/pre-amp assembly (HI-2623) means that daily ellipticity checks and periodic calibration checks can be made without removing the instrument from service. Spare probes, available from Holaday, can be pre-checked for immediate exchange with no meter down time.

Auto-ranging and the bar graph display make it quicker and easier for the operator to accurately perform oven leakage testing.

### *Laboratory Measurement*

The HI-1710 is ideally suited for engineering studies with a 0-1Vdc analog output for chart recorders and plotters. The remote control and reading features allows its use in many automated data acquisition configurations.