

Display ranges	
Power	-30 to -110dBm or 1000.00mW to 0.01pW
Measurement time	20ms to 1h
Calibration factor	± 200.000 dB
Reference	± 200.000 dBm/dB
Data memory	500 measurement results/channel (Data acquisition time ≥ 20 ms/measurement result)
Environmental	
Storage temperature	-40°C to +75°C
Operating temperature	0°C to +55°C
Humidity	<95% R.H. from 0°C to +40°C
Power	AC 100 to 240Vrms $\pm 10\%$, 50 to 60Hz $\pm 10\%$, 55VA max.
Dimensions	8.9mm H, 212.3mm W, 355mm D (3.5"×8.36"×14.0")
Weight	net 2.5kg (5.5lbs), shipping 4.5kg (9.9lbs)
HP-IB capability	modes and parameters can be programmed
Transfertime	20ms for one measurement result
(cont. trigger, watt)	<800ms for 100 measurement results out of memory
HP-IB interface	
Function code	SH1, AH1, T6, L4, SR1, RL1, PP0, DC1, DT1, CO, E2

Function Tests

Introduction

The procedures in this section test the electrical function of the instrument. The complete specifications to which the HP8153A is tested are given in "Specifications". All tests can be performed without access to the interior of the instrument.

Equipment Required

Equipment required for the Function Test is listed in the table below. Any equipment which satisfies the critical specifications given in the table may be substituted for recommended models.

Recommended Test Equipment

A. Head Adapter Module	HP 81533A
Optical Head	HP 81520A or HP 81521B
Test/Cal Box	P/N 08152-63201
Head Recognition Adapter	P/N 08152-63211
Digital Multimeter with Test Leads	HP 3466A
Test Cable	P/N 15414-61603
Oscilloscope	

OR

B. Sensor Module	HP 81530/1/2/6A
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Test Record Results of the Function Test may be tabulated on the Test Record provided at the end of the test procedures. It is recommended that you fill out the Test Record and refer to it while doing the test. Since the test limits and setup information are printed on the Test Record for easy reference, the record can be also be used as an abbreviated test procedure (if you are familiar with test procedures). The Test Record can also be used as a permanent record and may be reproduced without written permission from Hewlett-Packard.

Test Failure If the HP8153A fails any Function Test, return the instrument to the nearest Hewlett-Packard Sales/Service Office for repair.

Instruments Specifications

Specifications are the characteristics of the instrument which are certified. These specifications, listed in Appendix C are the limits against which the HP8153A can be tested. Appendix C also lists some supplemental characteristics of the HP8153A and should be considered as additional information.

Any changes in the specifications due to manufacturing changes, design, or traceability to the National Institute of Standards and Technology will be covered in a manual change supplement or revised manual. The specifications listed here supercede any previously published.

IA. Function Test Using the HP 81533A

The Function Test given in this section is using the HP 81533A Optical Head Interface Module and the 08152-63201 Test/Cal Box to check voltages and signals from and to the HP8153A Multimeter Mainframe.