

Agilent
85320A/B H20
Mixer Modules
0.1 to 3 GHz

Use this modification with manual part number
85320-90001.

Operating and Service
Manual



85320-90032



Agilent Technologies

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85320A/B H20 Mixer Modules

Description

This manual modification describes the differences in the 85320A H20 and 85320B H20 compared to the standard 85320A and 85320B.

The 85320A H20 and the 85320B H20 are identical in function to the standard 85320A and 85320B except that the frequency range of operation is 0.1 to 3.0 GHz instead of 2.0 to 26.5 GHz. Fundamental mixing is the only mode of operation.

The 85320A H20 test mixer and the 85320B H20 reference mixer are designed for use with the 85309B Option 400 or 401 or 402.

Accessories

Item	Part Number
85320A/B H20 Mixer Modules Operating and Service Manual Modification, qty 1	85320-90032
RF adapter, Type-N (m)/(m), qty 1 for each module	1250-1475
Mounting bolts, (4) for each module	2940-0287

Specifications

Operating Frequency Range

0.1 to 3.0 GHz (fundamental mixing mode ONLY)

Maximum Input Levels

Maximum RF level at RF and LO inputs (damage level): +20 dBm

Table 1-1 Minimum LO Input Levels Under Normal Operations

LO Frequency	Minimum Power	Typical Power	Maximum Power
0.1 – 3 GHz	+8 dBm	+10 dBm	+16 dBm

Table 1-2 Conversion Loss (LO at +10 dBm)

LO Frequency	LO Harmonic	Typical Loss	Maximum Loss
0.1 – 3 GHz	1	-12 dB	-16 dB

Connector Types

Type-N female (all ports)

Weight (approximately)

85320A H20: 0.70 kg (1.52 lb.)

85320B H20: 1.00 kg (2.2 lb.)

Dimensions (excluding connectors):

85320A H20: width: 97 mm (3.8 in)

length: 122 mm (4.8 in)

height: 34 mm (1.3 in)

85320B H20: width: 97 mm (3.8 in)

length: 186 mm (7.3 in)

height: 31 mm (1.2 in)

Rebuilt/Exchange Parts

The Rebuilt/Exchange Parts program does not apply to the 85320A/B H20. Mechanical mounting information can be found on the last page of this document.

Performance Notes

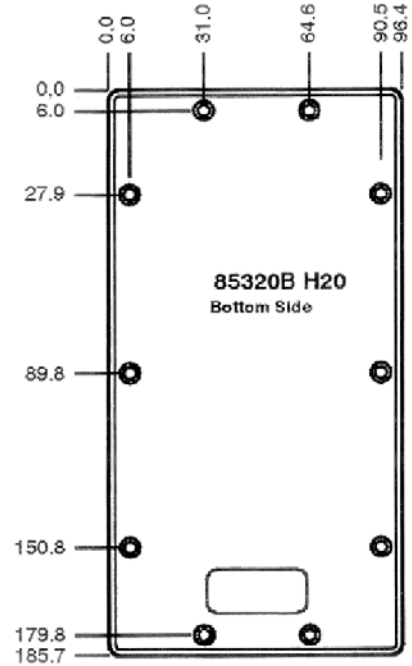
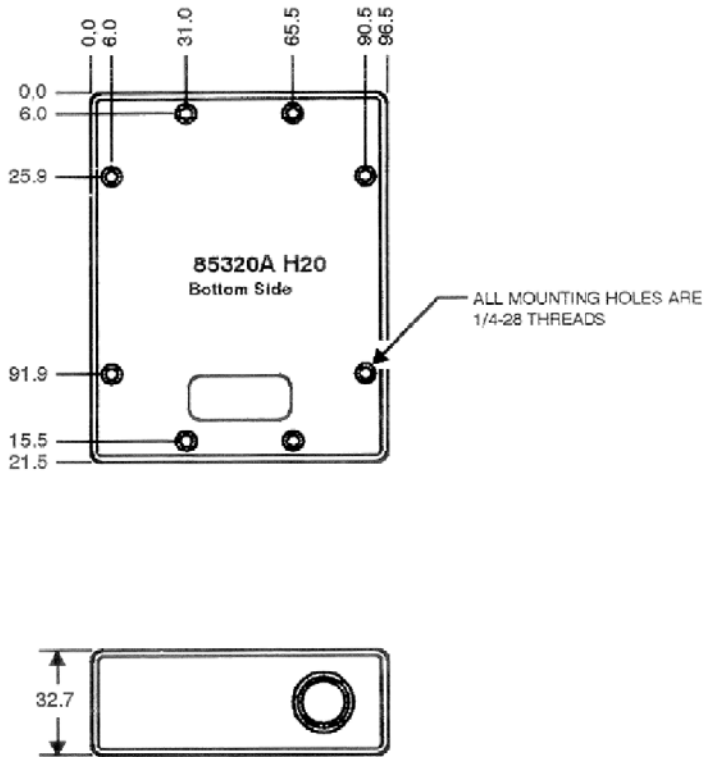
85320A/B H20 Mixers and the 85309B

The 85320A/B H20 mixer modules were designed to be used with the 85309B Option 400 or 401 or 402. This combination of products will provide the full 85320A/B H20 frequency range of operation.

The frequency range of operation consists of two bands: low band operating from 0.1 to 1.0 GHz and high band operating from 0.3 to 3.0 GHz.

If the 85320A/B H20 mixer modules are used with the 85309B Standard or Option 001 or 002, the frequency range of operation is limited to 0.3 to 3 GHz.

Mechanical Mounting Information



Notes:

1. All Dimensions are Metric (mm).
2. Type-N Female Connectors on all Four Ports.



85320_032_001

Contacting Agilent

Assistance with test and measurement needs and information on finding a local Agilent office are available on the Web at:

www.agilent.com/find/assist

NOTE

In any correspondence or telephone conversation, refer to the Agilent product by its model number and full serial number. With this information, the Agilent representative can determine whether your product is still within its warranty period.

