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

This is Operating and Service Guide for the 85320A/B H20 0.1 to 3 GHz Mixer Modules.
Use this modification with manual part number 85320-90001

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NOTE

A **NOTE** calls the user's attention to an important point or special information in the text.

Getting Assistance from Keysight

Contacting Keysight

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

<http://www.keysight.com/find/assist>

If you do not have access to the Internet, please contact your Keysight field engineer.

NOTE

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

If You Have Problems With the Upgrade Kit Contents

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Keysight () link.

85320A/B H2O Mixer Modules

Description

This manual modification describes the differences in the 85320A H2O and 85320B H2O compared to the standard 85320A and 85320B.

The 85320A H2O and the 85320B H2O 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 H2O test mixer and the 85320B H2O reference mixer are designed for use with the 85309B Option 400 or 401 or 402.

Accessories

Table 1 **85320A/B Conversion Loss**

Item	Part Number
85320A/B H2O 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)

Table 2 **85320A/B Conversion Loss**

Item	Part Number
85320A/B H2O 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

Maximum Input Levels

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

Table 3

Minimum LO Input Levels Under Normal Operations

Item		Part Number	
0.1 – 3 GHz	+8 dBm	+10 dBm	+16 dBm

Table 4

Conversion Loss (LO at +10 dBm)

Item		Part Number	
0.1 – 3 GHz	1	–12 dB	–16 dB

Connector Types

Type-N female (all ports)

Weight (approximately)

85320A H2O: 0.70 kg (1.52 lb.)

85320B H2O: 1.00 kg (2.2 lb.)

Dimensions (excluding connectors):

85320A H2O:

- width: 97 mm (3.8 in)
- length: 122 mm (4.8 in)
- height: 34 mm (1.3 in)

85320B H2O:

- 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 H2O. Mechanical mounting information can be found on the last page of this document.

Performance Notes

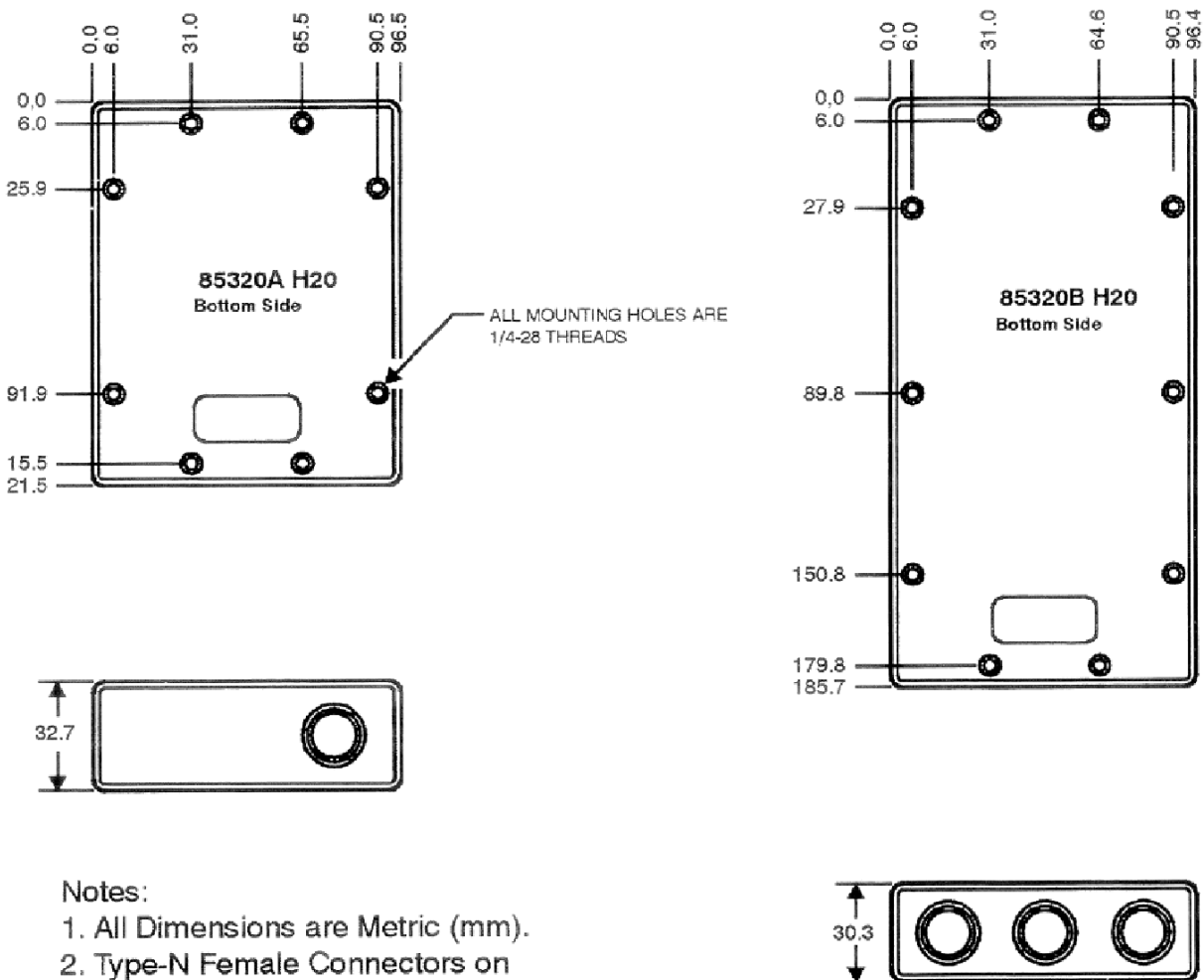
85320A/B H2O Mixers and the 85309B

The 85320A/B H2O 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 H2O 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 H2O 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.

Figure 1 Mechanical Mounting Information



85320_032_001

Compression (Nominal)

This sections contains nominal compression information for using the 85320A/B H2O Test Set Mixer with 85309B LO/IF distribution units.

Table 5 **System Compression Level (Nominal)^a**

System Parameter	GHz	0.1-3
Compression Level (at 0.1 dB)	-dBm	18

a. Nominal compression calculated from N5264B 0.1dB compression point and using the default 85309B configuration.



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