

12 GHz 3rd channel option for HP 53131A, HP 53132A and HP 53181A.

PRELIMINARY DATASHEET

Features

- 0.1 to 12 GHz operation window.
- Input protection (27 dBm max).
- AC coupled (max 35 V to GND).

Description

The Cojotech HPO-120 is a replacement kit for the original 3rd channel option, for the HP/Agilent 53131A, 53132A and 53181A, which have been discontinued.

It provides reliable measurements up to 12 GHz, while maintaining the desirable properties of its predecessor (the HPO-100) - similar sensitivity, no self-oscillation, very good input protection.

For different frequency ranges, please check the [selection guide](#).

Package contents

- HPO-120 board.
- Based on your choice, an SMA, an N-type or a 12 GHz BNC connector.
- IDC cable.
- Mounting screws.

For the BNC connector, an optional 12 GHz BNC male to SMA female adapter can be added.

Warranty

This product benefits from a 2-year warranty against defects in materials and workmanship.

Absolute Maximums

Parameter	Ratings
Input Power	+27 dBm
DC Voltage	±35 V

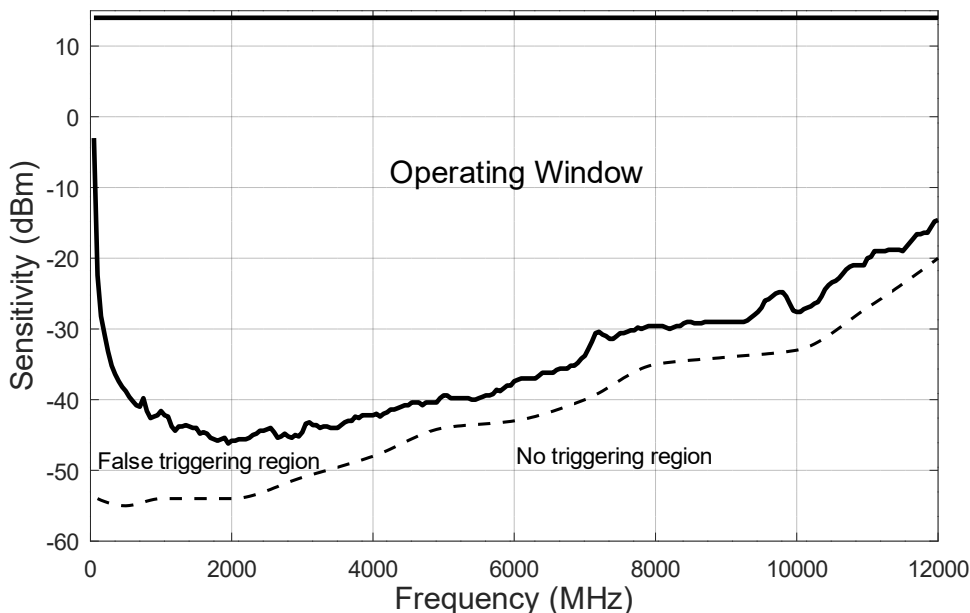
Sensitivity

Frequency (MHz)	Typical (dBm)	Worst (dBm)
100	-22	-19
200	-30	-27
500	-38	-35
1,000	-41	-39
2,000	-44	-41
3,000	-43	-39
4,000	-40	-38
5,000	-37	-35
6,000	-35	-33
7,000	-33	-30
8,000	-27	-24
9,000	-28	-26
10,000	-26	-23
11,000	-17	-15
12,000	-14	-12

The sensitivity is considered to be the required amplitude for a reading with an accuracy of 0.1 ppm.

Correct operation is guaranteed up to +14 dBm.

Sensitivity vs Frequency



Mechanical properties

SMA ([SMA-BBLK-2](#))

Description	Material	Finish
Jacket	Stainless steel	
Body	Stainless steel	
Contact	Beryllium copper	Gold plated
Dielectric	PTFE	

N-type

Description	Material	Finish
Body	Brass	Nickel plated
Contact	Beryllium copper	Gold plated
Dielectric	PTFE	

BNC

Description	Material	Finish
Body	Brass	Nickel plated
Contact	Beryllium copper	Gold plated
Dielectric	PTFE	

PRELIMINARY DATASHEET

this is not the final version of the datasheet and the information presented here is bound to change.

Notes:

- 1). Unless otherwise stated, all specifications are nominal.
- 2). The information contained in this document is accurate to the best of our knowledge. We reserve the right to update it, with new information or corrections, without notice.