

3 GHz 3<sup>rd</sup> channel option for HP 53131A, HP 53132A and HP 53181A.

## Features

- Improved sensitivity.
- Input protection (27 dBm max).
- Can be used past 3 GHz.
- VSWR < 2.5.
- AC coupled (max 35 V to GND).

## Description

The Cojotech HPO-030-N is a replacement kit for the original 3<sup>rd</sup> channel option, for the HP/Agilent 53131A, 53132A and 53181A, which have been discontinued.

It offers improved sensitivity compared to the original, while providing similar input characteristics, which makes it a perfect drop-in replacement.

By default, in order to keep price down, it comes equipped with a low-cost BNC to SMA cable, but it can optionally be upgraded with the BNC-2 option, which changes the low cost cable, into one with much lower loss and better construction quality.

## Package contents

- HPO-030 board.
- Panel mount BNC to SMA connector cable.
- IDC cable.
- Mounting screws & spacers.

## Warranty

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

## Absolute Maximums

Parameter	Ratings
Input Power	27 dBm (5 Vrms)
DC Voltage	$\pm 35$ V

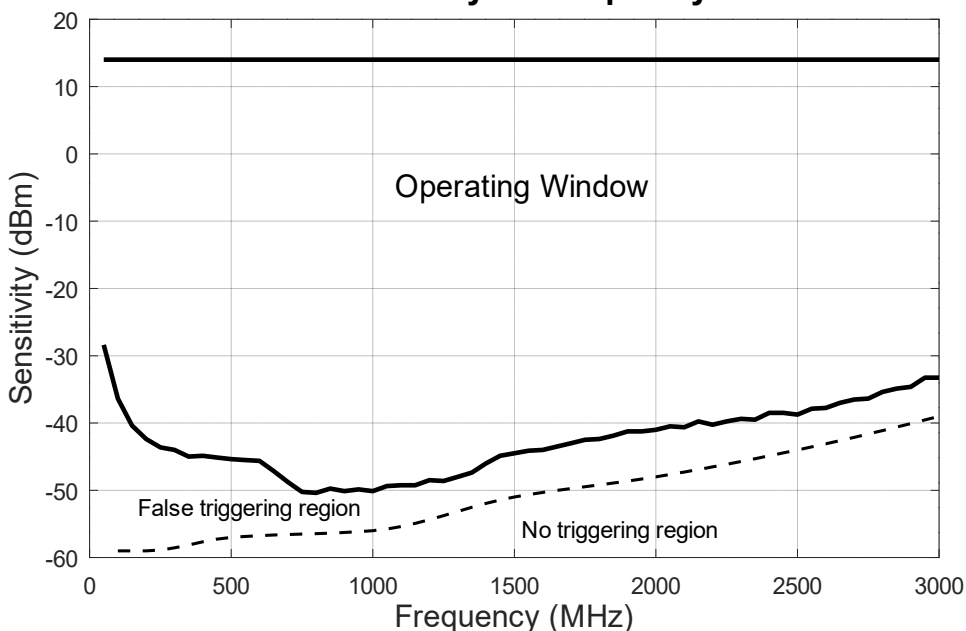
## Sensitivity

The required amplitude for a reading with an accuracy of 0.1 ppm.

Correct operation tested up to +14 dBm, limited by signal generator.

Frequency (MHz)	Typical (dBm)	Worst (dBm)
50	-26	-22
100	-36	-28
200	-42	-38
500	-45	-43
1,000	-50	-46
1,500	-44	-41
2,000	-41	-37
2,500	-38	-35
3,000	-33	-30

**Sensitivity vs Frequency**



# Mechanical properties of the connectors

## BNC (low-cost option)

Description	Material	Finish
Body	Brass	Nickel plated
Contact	Brass	
Dielectric	PTFE	

## BNC-2 (SMA-M-BNC-BF-F405-20)

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

### 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.