



# Co-located transmitters

## **SP85 GNSS receiver**

13 December 2019



## 1. Revision History

Date	Changes	Author
December 13, 2019	Creation	J-C Bremaud

## 2. Purpose

This document provides the technical description of co-located radio transmitters of the Spectra Geospatial SP85 GNSS receiver (P/N 118893-00).

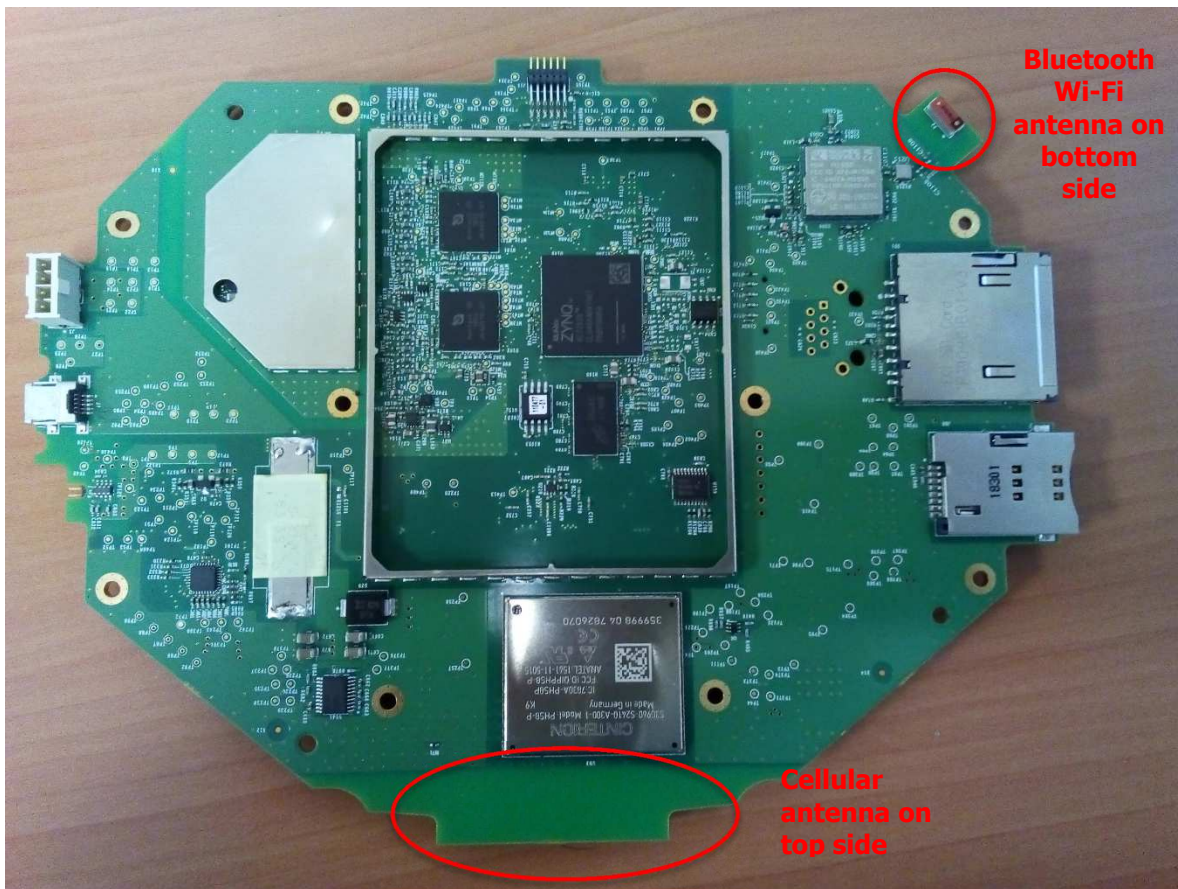
## 3. Co-located transmission

The SP85 unit has several use cases described in the following table:

Use cases	Bluetooth (2.4GHz)	UHF 400 Land Mobile radio	Cellular 2G/3G	Wi-Fi (2.45GHz)
Field use case #1	Yes	Yes		
Field use case #2	Yes		Yes	
Office use	Yes			Yes

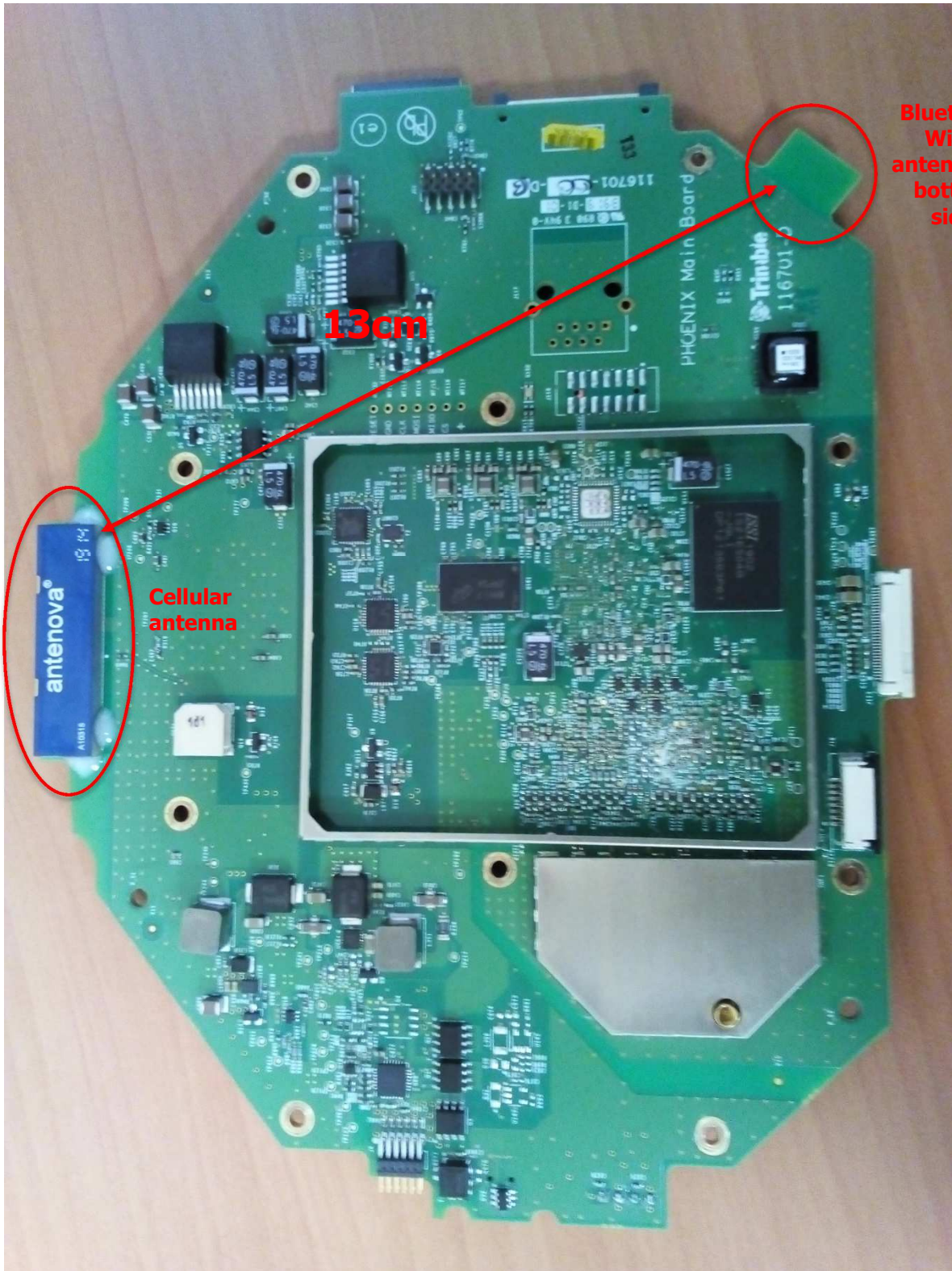
Note: Bluetooth and Wi-Fi are realized using a combo module using the same RF chain between Bluetooth, and Wi-Fi. Time sharing is performed between the two functions on the same antenna.

## 4. Distance between antennas



Main board bottom side

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Bluetooth  
Wi-Fi  
antenna on  
bottom  
side

13cm

Cellular  
antenna

Main board top side

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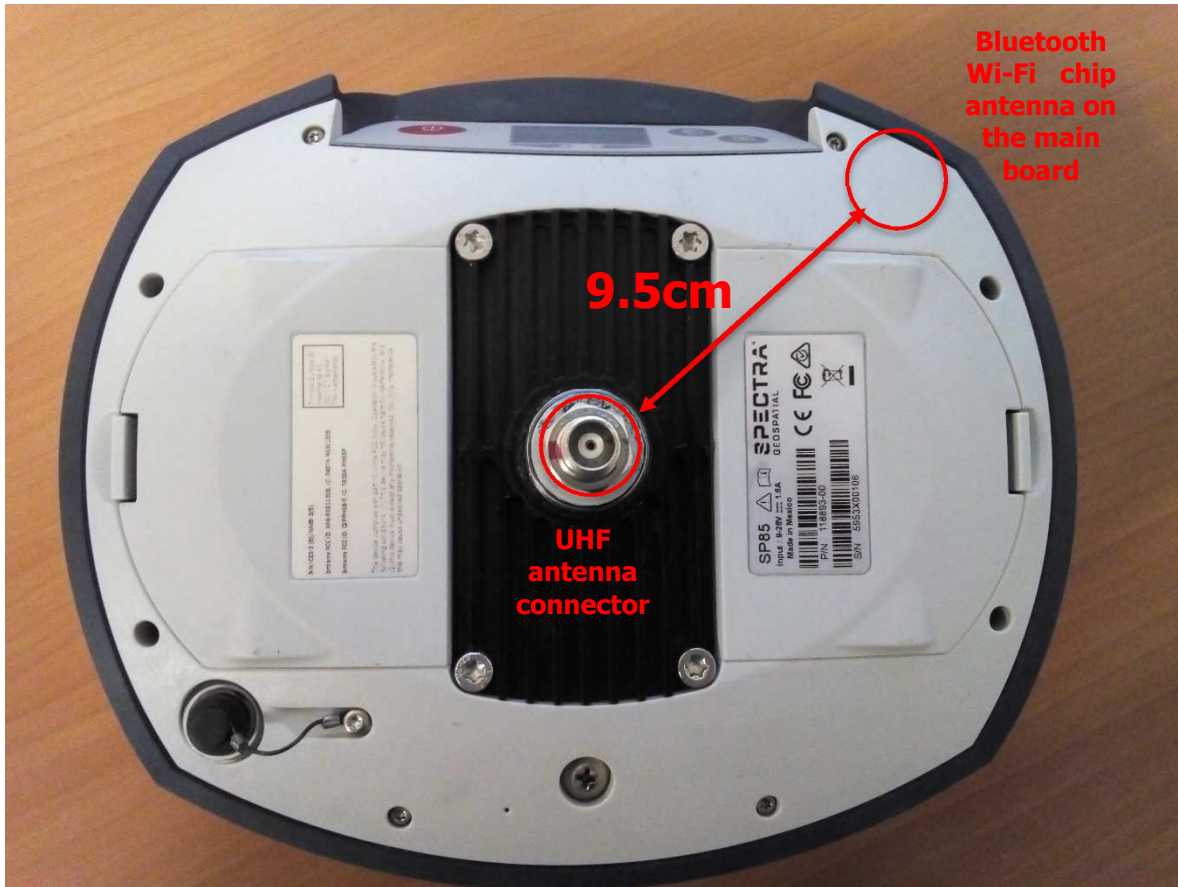


SP85 GNSS receiver on the pole



UHF antenna without the pole

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