

# Antenna Information of DCU150 module

## 1, Basic information of Antenna

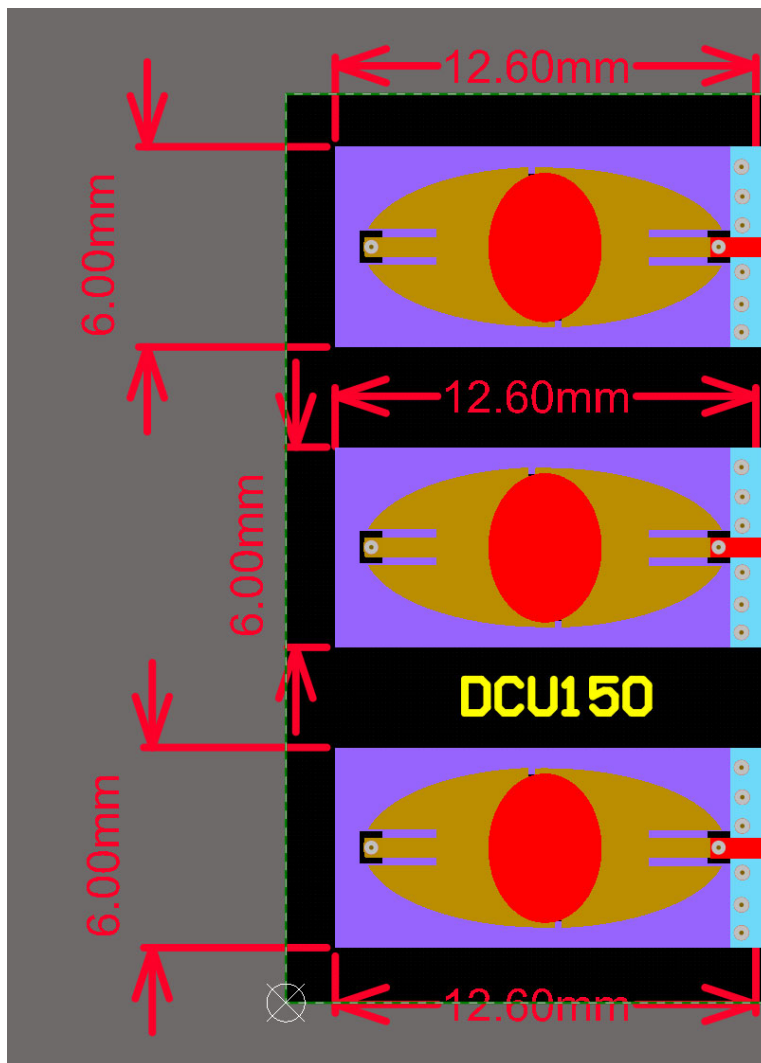
Supplier: Truesense S.R.L.

Antenna Type: On Board PCB Patch Antenna

Antenna Polarization: Linear

Antenna Part Number: N/A

Antenna Size: 12.6mm \* 6.0mm (x3 pcs, 1pcs for TX, 2pcs for RX)

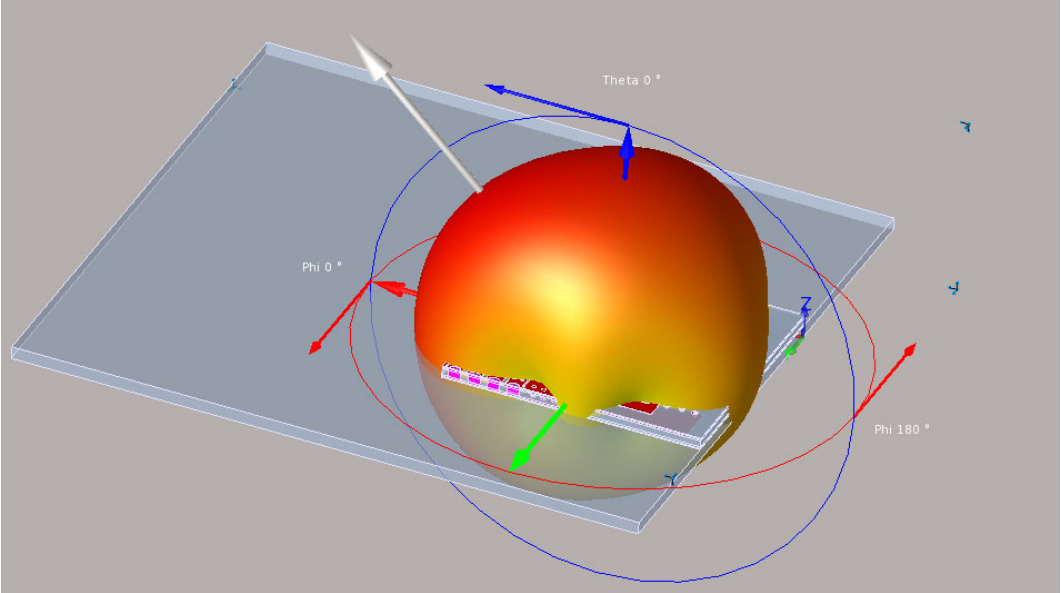


## 2, Antenna operating frequency band

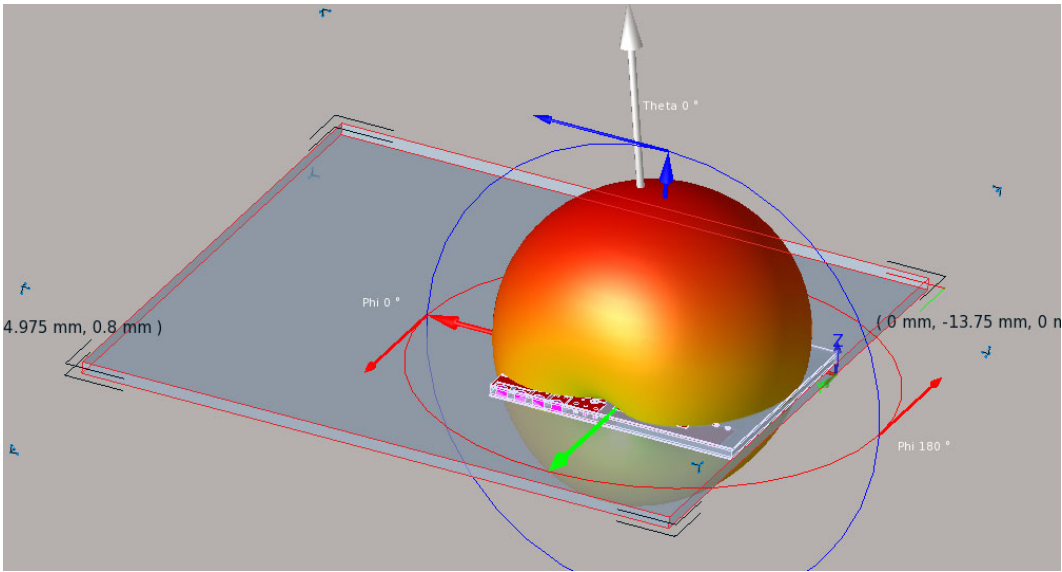
6.0 ~ 8.5GHz

3, Peak Directivity:

|                      | 6.5GHz | 8GHz |
|----------------------|--------|------|
| PeakDirectivity(dBi) | 5.3    | 5.8  |
| Efficiency           | 60%    | 66%  |



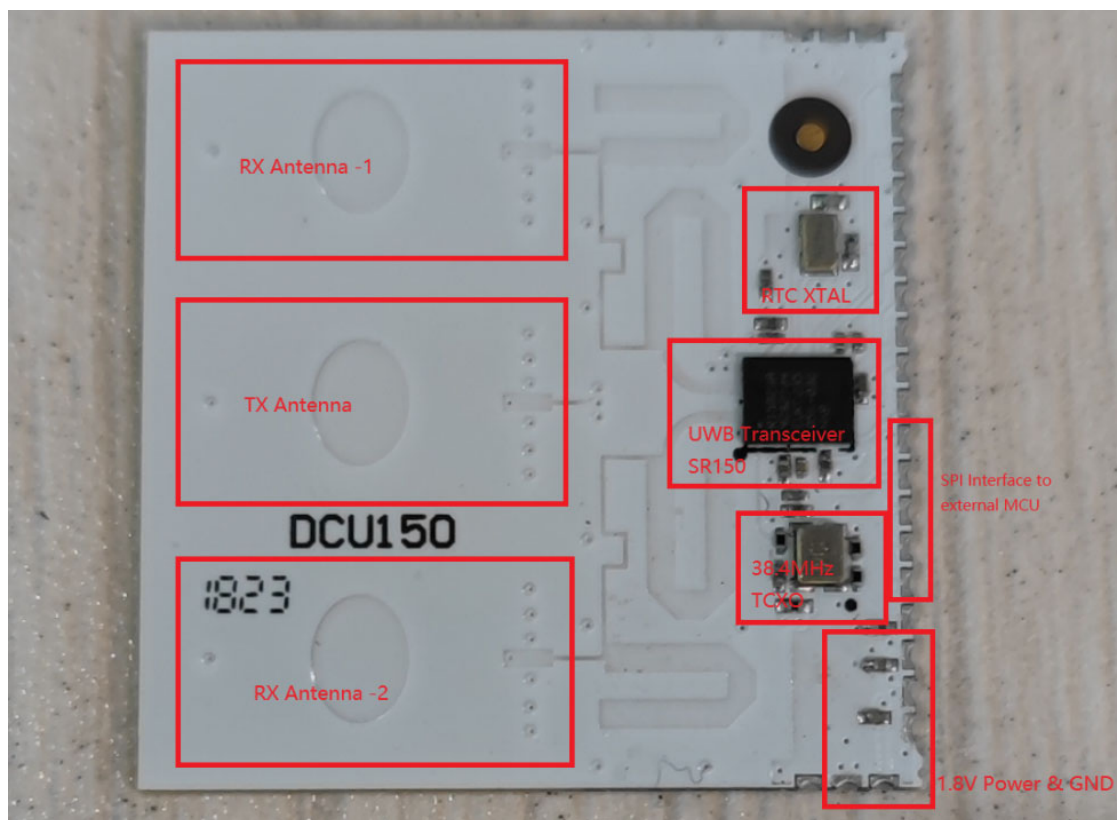
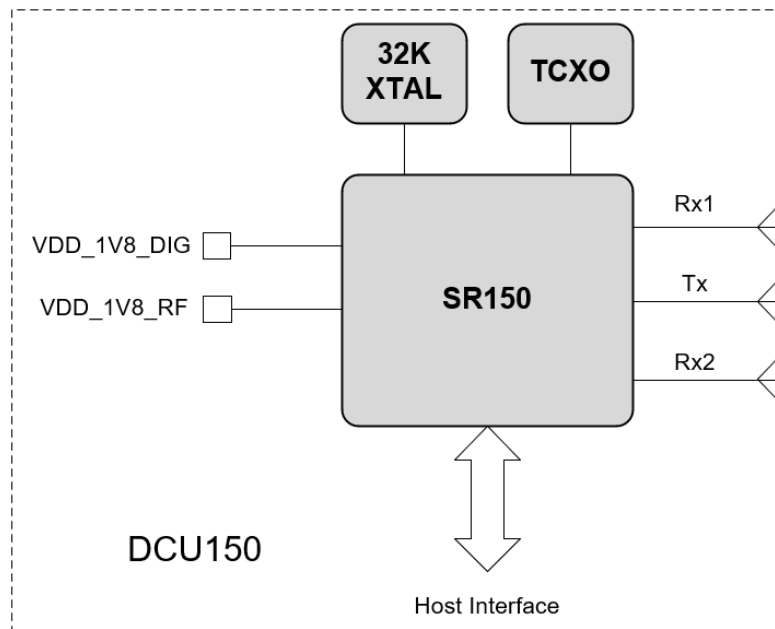
Directivity at Channel 9



Directivity at Channel 9

Dir

# OPS



DCU150 module is comprised of below key parts:

- 1, NXP UWB Transceiver IC – SR150;
- 2, 38.4MHz oscillator for system clock;
- 3, 32.768KHz for real time clock;
- 4, 3x PCB patch antenna for 1xTX&2xRX;
- 5, SPI interface connected to external MCU;
- 6, 1.8V power supply input.

With Truesense UWB firmware in DCU150, after powered with 1.8V&38.4MHz clock worked, external MCU can communicate with DCU150 through SPI interface, and then do ranging operations (1xTX&2xRX) through the 3pcs PCB patch antenna.

Antenna Manufacturer:

Address: Viale Lombardia, 217 - 20900, Monza, Italy

Antenna Type: Portenta UWB Shield