

Document ID	https://docs.google.com/document/d/1PmzOCX_1DUKRK7fxVOCz53n7YPmT7TO9
Responsible	Oystein Moldsvor
Classification	Confidential

Revision History Table

Named revision	Date	Comment:
01	2024-02-12	First version
02	2024-02-13	Added test results and moved images to operational description

Antenna Details

The antenna in 102774 Temperature Probe Sensor US is an integrated PCB antenna. It is based on a helix structure.

The main characteristics of the antenna are:

- Antenna Type: Integrated PCB Antenna
- Antenna structure: Helix
- Total copper length: 149 mm
- Radiation pattern: Similar to dipole antenna
- Antenna Details : Product PCB, part number 102548
- Design: Disruptive Technologies Research AS
- Antenna gain: < 0 dBd

The PCB thickness is 2 mm and the area of the antenna on the PCB is 19 mm x 6 mm.

Test results

The antenna gain was measured at the top, middle and bottom frequencies of the band in the RF test report “RF Test Report - PRJ0039553 Temp Probe Sensor - Nemko TRF FCC Part 15.247 DTS REP016411.pdf”. The results are shown in the table below.

Carrier Frequency	Peak Conducted Power		Peak ERP	Antenna Gain
	dBm			
903.25 MHz	12.3		12.0	-0.3
915.00 MHz	12.3		9.8	-2.5
926.75 MHz	12.2		7.2	-5.0