

Cellular Antenna specification

Antenna type	Inhouse design		
Frequency range	Band 2	Band 4	Band 12
	1850 - 1910MHz	1710 – 1755MHz	699 – 716MHz
Antenna gain max (peak)	1.8dBi	1.5dBi	0.3dBi

- RF Cellular:
 - LTE Cat-M1, Power Class 3
 - Typical Sensitivity TIS = -100dBm
 - Typical TRP = +20dBm
 - Software based radio allowing support of extra bands for worldwide operation (B2, 4, 12)

LoRa Antenna specification

Antenna type	Inhouse design		
Frequency range	Freq. Channel	Freq. Channel	Freq. Channel
	902.300 MHz	908.700 MHz	914.900 MHz
Antenna gain max (peak)	0dBi	0dBi	0dBi

- RF LoRa:
 - Typical TRP = +28dBm
 - Typical Sensitivity TIS = -135dBm
 - Tx/Rx supporting protocol: LoRaWAN

BLE Antenna specification:

Antenna type	Printed antenna		
Frequency range	Freq. Channel	Freq. Channel	Freq. Channel
	2404 MHz	2446 MHz	2480 MHz
Antenna gain max (peak)	+0.5dBi	+0.5dBi	+0.5dBi

- RF BLE
 - Typical TRP = +6dBm
 - Typical Sensitivity TIS = -96dBm
 - Tx/Rx supporting: Bluetooth® 5.4 specification, IEEE 802.15.4-2011