GTT GLB PSMART-BOX® ENC KIT - TELTONIKA RUT901 + 4G/LTE & WIFI

Simple and quick to install, the GTT pSmart-Box® - Essential IP67 / NEMA6 outdoor protection and enhanced antenna peak gain connection for the Teltonika RUT900 series router

2x2 MIMO Omnidirectional Antenna Enclosure Kit

- **Durable design**: Built to withstand harsh environments
- **Leak proof**: **IP67 / NEMA6** protection against water and dust ingress
- **Advanced connectivity**: **4G/LTE** peak gain **6.3dBi (Antenna 1) 6.1dBi (Antenna 2)** and **Wi-Fi** peak gain **6.2dBi**
- **Guaranteed weather, dust and variable heat mitigation**
- **240Km/h wind speed tolerance** essential for remote and demanding locations
- **Complete omnidirectional antenna enclosure kit - ready to install**

Material and Durability

- **High impact & UV stabilised polycarbonate**
- **Mounting options**: Stainless steel (304) fixed or pole mount with vertical and horizontal positioning
- **Lightweight**: Weighs just 1kg (antenna and enclosure only).

Technical Specifications

- **Outdoor IP67 / NEMA6**: Water and dust proof with integrated vent for humidity & pressure balancing
- **Embedded omni antennas**: 2 x Internal 4G/LTE, 5G, 5G Redcap and 1 x Internal Wi-Fi (Dual Band), Bluetooth + Optional GPS
- **Gore® Vent** - **Internal condensation & pressure management:** Essential atmospheric temperature control, managing internal humidity and temperature variations
- **Power via PoE** - Power Over Ethernet RJ45 (Cat5e) Gland, other options available.

- **Fast 'quick slide-In' Mounting Bracket**: Stainless steel (304), corrosion resistant with vertical or horizontal positioning options
- **Vibration Tested**: Suitable for use in harsh and extreme environments
- **Wind Speed Tolerance**: 240Km/h

Installation and Connectivity

- Custom designed internal 'quick fix' custom mounting plate for Teltonika devices
- Preinstalled internal antenna cables to easily connect your wireless device
- External pole/wall stainless steel mounting bracket – strong and corrosion resistant

Design for Ultimate Protection, Connection & Longevity

- **Versatile Applications**: IP67/NEMA6 outdoor protection for the **Teltonika RUT900 series router**used in industrial / commercial networking operations and projects Worldwide
- **Cost-Effective Solution**: No minimum order required. Prototype your solution with next day delivery available.
- **Global Availability**: Dispatched from the UK
- **Compact and Lightweight**: 0.86g (not including router)
- **Innovative Design**: Low-profile and ready for immediate deployment
- **Avoid Set Up Build Time** - Ship your Teltonika device to GTT Wireless and we can preinstall into our enclosure to be sent directly to your field engineer 'installation ready' for immediate deployment on site.
- **Stocked in the UK**: No minimum order required, volume price breaks available

Contact our Specialist Team: Email sales@gttwireless.com or Call Us on +44 (0) 1572 338011 The GTT Wireless pSmart-Box® IP67 / NEMA6 outdoor enclosure provides essential protection, and seamless connectivity in challenging outdoor environments for PCB boards, electronics and IoT devices.

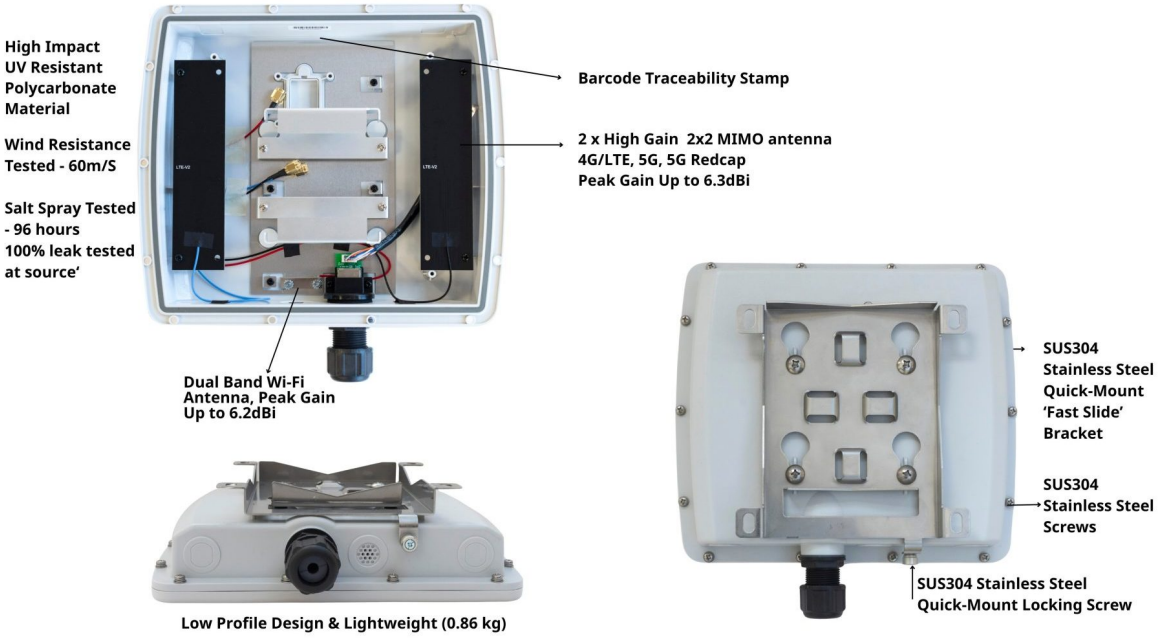
PRODUCT GALLERY

TECHNICAL DATA

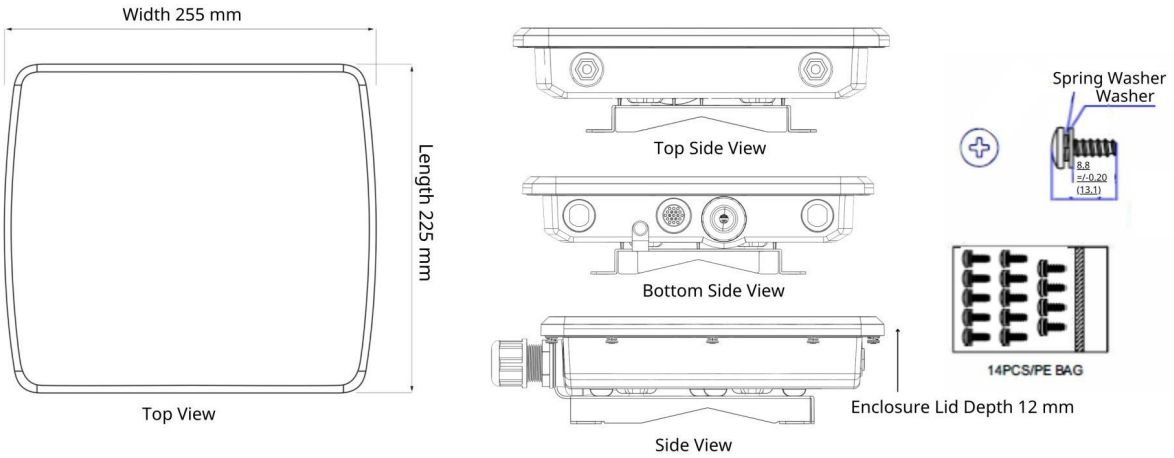
Antenna Band	Multi-Band
Antenna Bandwidth - 4G & LTE	1710-2170, 2300-2690MHz, 698-960
Antenna Bandwidth - 5G & 5G Redcap	3300-4200MHz
Antenna Bandwidth - Wi-Fi & Bluetooth	2400-2500MHz, 5150-5850MHz
Antenna Dimensions	Embedded Antenna - L 145 mm x W 35 mm x D 1 mm

Antenna I/O	2 x 2 MIMO
Enclosure External Dimensions	pSmart-Box GLB - L 220 mm x W 250 mm x D 50 mm
Enclosure External Mount Bracket	Fixed, Pole Mount - Fast Slide
Enclosure Format	GLB
Enclosure Internal Dimensions	pSmart-Box - GLB - L 189 mm x W 219 mm x D 35mm
Enclosure Internal Mount Bracket	Included
Enclosure Lid Type - Standard	pSmart-Box - GLB - Deep - Flat Front - Polycarbonate
Enclosure I/O M25 Ports	1
Enclosure Pressure & Humidity Equaliser	Yes - Gore Vent
Product Brand	Teltonika
Product Colour	White
Product Environmental Certificates	RoHS Compliant
Product Humidity Range	95% @ 55°C
Product Impedence	50 Ohms
Product Ingress	IP67, NEMA6 Rated
Product Material	HIUV PC - High Impact, UV Stabilised Polycarbonate
Product Temperature Range	-20°C to +70°C
Product Wind Speed Tolerance	240 Km, h
Product Vswr	1 min
Product Screw Size	10mm
Product Screw Type	M4
Product Connector Type	2 x SMA + 1 x RP-SMA
Antenna Peak Gain - Antenna 1 - 4G/LTE 5G Redcap	6.1 dBi
Antenna Peak Gain - Antenna 2 - 4G/LTE 5G Redcap	6.3 dBi
Antenna Peak Gain - Antenna 3 WiFi + Bluetooth	6.2 dBi
Enclosure Optional I/O	M25 Port with USB-C or RJ45 (Cat5e)
Product Range Model	Teltonika RUT901 Router - not included
Product Category	Enclosure

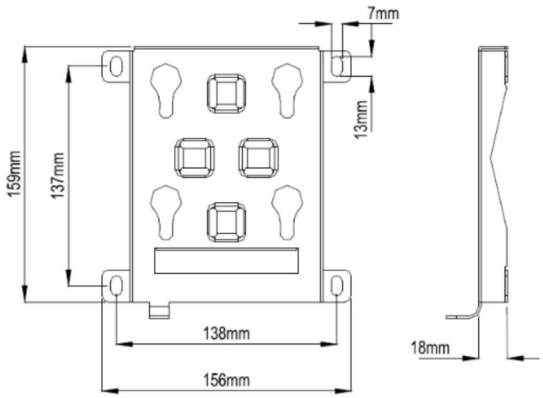
TECHNICAL DIAGRAMS



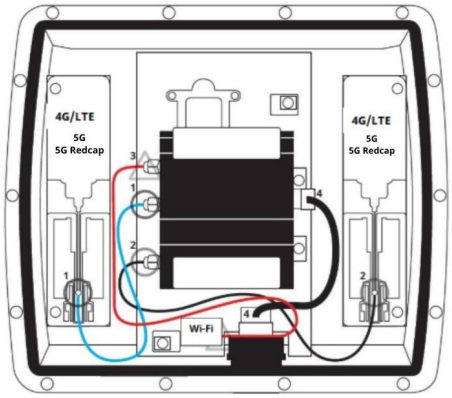
Enclosure UV Resistant Polycarbonate Lid



Mounting Bracket Dimensions



Installation Connection Diagram



Connector Guide :

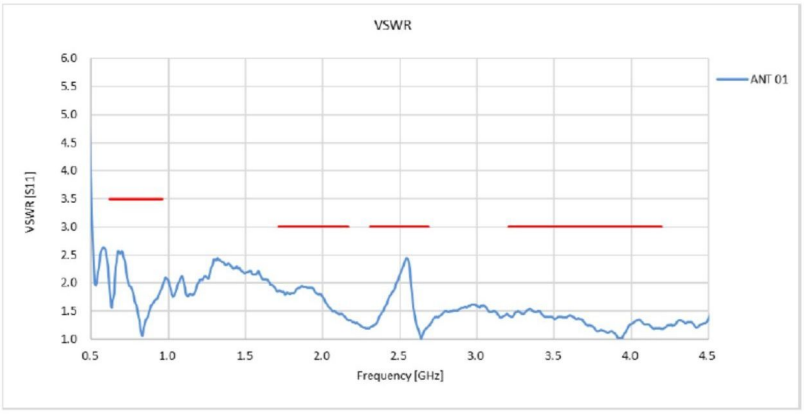
1. SMA connector to LTE/4G antenna left hand (blue) cable
2. SMA connector to LTE/4G antenna right hand (black) cable
3. RPSMA connector to Wi-Fi antenna (red) cable (Wi-Fi)
4. 2 x 4 pin housing to RJ45 (Cat5e) 150 mm cable (LAN)

Connect each cable connector then tighten with 8mm torque spanner to the required torque : 0.9-1.1 Nm

S-PARAMETERS

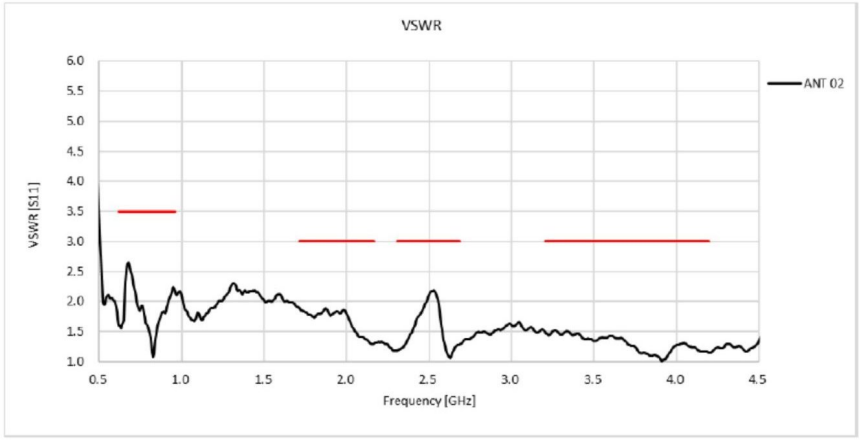
S-Parameters : VSWR – ANT 01 (4G/LTE, 5G)

Frequency(MHz)	ANT 01	Frequency(MHz)	ANT 01	Frequency(MHz)	ANT 01	Frequency(MHz)	ANT 01
617	2.1	1710	1.8	2300	1.2	3300	1.5
960	1.5	2170	1.7	2690	2.2	4200	1.4
698-960 MAX.	2.5	1710-2170 MAX.	2.0	2300-2690 MAX.	2.5	3300-4200 MAX.	1.5



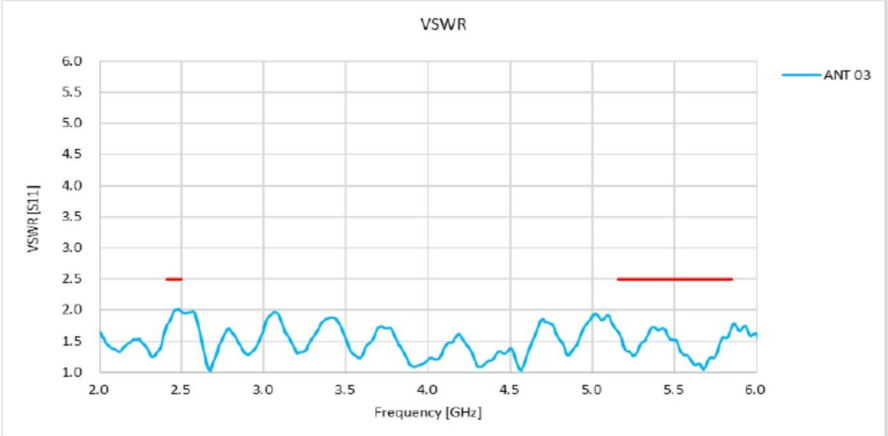
S-Parameters : VSWR – ANT 02 (4G/LTE, 5G)

Frequency(MHz)	ANT 01	Frequency(MHz)	ANT 01	Frequency(MHz)	ANT 01	Frequency(MHz)	ANT 01
617	1.7	1710	1.9	2300	1.2	3300	1.4
960	1.6	2170	1.8	2690	2.1	4200	1.4
698-960 MAX.	2.7	1710-2170 MAX.	1.9	2300-2690 MAX.	2.2	3300-4200 MAX.	1.5



S-Parameters : VSWR – ANT 03 (WiFi)

Frequency(MHz)	ANT 03	Frequency(MHz)	ANT 03
2400	1.7	5150	1.7
2500	2.0	5850	1.8
2400-2500 MAX.	2.1	5150-5850 MAX.	1.8



PEAK GAIN

Peak Gain / Efficiency : ANT 01 (LTE)

ANT 01			
Frequency (MHz)	3D		
	Efficiency	Avg. Gain	Peak Gain
617	41%	-3.9	1.3
698	41%	-3.9	1.4
704	42%	-3.8	1.6
746	42%	-3.8	1.5
760	48%	-3.2	1.8
787	63%	-2.0	2.6
791	68%	-1.6	2.7
824	85%	-0.7	4.1
836	81%	-0.9	4.5
849	80%	-1.0	4.9
869	79%	-1.0	5.0
880	77%	-1.1	4.5
894	71%	-1.5	3.7
900	69%	-1.6	3.7
915	67%	-1.7	3.2
925	66%	-1.8	3.3
940	65%	-1.8	3.2
960	64%	-1.9	3.2

ANT 01			
Frequency (MHz)	3D		
	Efficiency	Avg. Gain	Peak Gain
1710	72%	-1.4	4.3
1750	74%	-1.3	4.6
1785	74%	-1.3	4.5
1805	73%	-1.4	4.3
1840	72%	-1.4	3.9
1850	71%	-1.5	3.8
1880	70%	-1.6	4.0
1910	66%	-1.8	4.4
1920	65%	-1.9	4.6
1930	65%	-1.8	4.8
1950	65%	-1.8	5.1
1960	65%	-1.9	5.1
1980	64%	-1.9	5.0
1990	64%	-1.9	5.0
2110	74%	-1.3	5.4
2140	75%	-1.2	5.5
2170	78%	-1.1	5.4

ANT 01			
Frequency (MHz)	3D		
	Efficiency	Avg. Gain	Peak Gain
2300	79%	-1.0	6.0
2400	70%	-1.6	5.5
2500	53%	-2.8	2.8
2570	56%	-2.6	3.4
2595	67%	-1.7	4.4
2600	70%	-1.6	4.5
2620	75%	-1.3	4.4
2690	75%	-1.2	4.2

ANT 01			
Frequency (MHz)	3D		
	Efficiency	Avg. Gain	Peak Gain
3300	68%	-1.7	5.0
3400	70%	-1.6	5.1
3500	72%	-1.4	4.8
3550	71%	-1.5	4.8
3600	72%	-1.4	5.1
3700	74%	-1.3	5.3
3800	76%	-1.2	5.9
3900	74%	-1.3	6.3
3980	71%	-1.5	5.9
4000	69%	-1.6	5.2
4100	70%	-1.6	4.6
4200	72%	-1.4	4.7

Peak Gain / Efficiency : ANT 02 (LTE)

ANT 02			
Frequency (MHz)	3D		
	Efficiency	Avg. Gain	Peak Gain
617	39%	-4.1	1.3
698	40%	-4.0	1.2
704	43%	-3.7	1.3
746	48%	-3.2	1.2
760	56%	-2.5	1.5
787	69%	-1.6	2.9
791	73%	-1.3	3.0
824	77%	-1.1	3.6
836	72%	-1.4	3.8
849	70%	-1.6	3.9
869	64%	-1.9	3.4
880	63%	-2.0	3.0
894	60%	-2.2	2.6
900	60%	-2.2	2.7
915	61%	-2.1	3.0
925	62%	-2.1	3.4
940	63%	-2.0	3.8
960	63%	-2.0	4.1

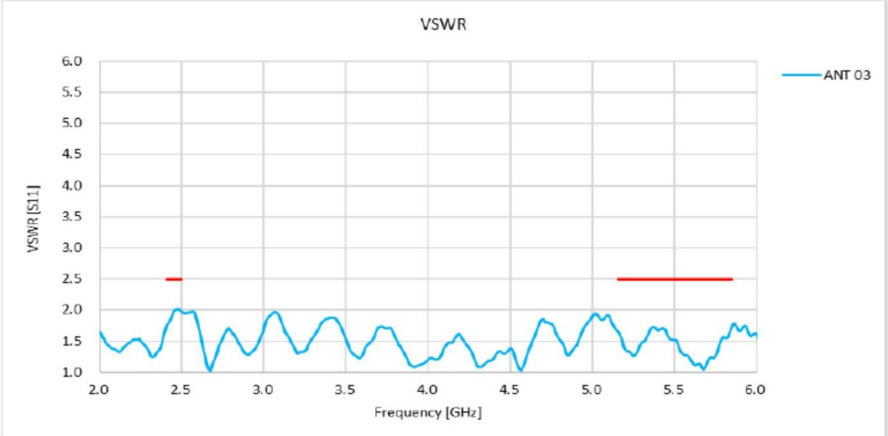
ANT 02			
Frequency (MHz)	3D		
	Efficiency	Avg. Gain	Peak Gain
1710	75%	-1.2	4.1
1750	76%	-1.2	4.4
1785	76%	-1.2	5.2
1805	76%	-1.2	5.2
1840	74%	-1.3	5.1
1850	73%	-1.4	5.0
1880	71%	-1.5	4.6
1910	66%	-1.8	4.5
1920	66%	-1.8	4.6
1930	66%	-1.8	4.8
1950	65%	-1.9	5.0
1960	64%	-1.9	5.0
1980	64%	-1.9	5.1
1990	64%	-1.9	5.1
2110	75%	-1.3	5.9
2140	75%	-1.3	5.8
2170	77%	-1.2	5.6

ANT 02			
Frequency (MHz)	3D		
	Efficiency	Avg. Gain	Peak Gain
2300	77%	-1.2	5.7
2400	68%	-1.7	4.9
2500	53%	-2.7	2.6
2570	49%	-3.1	2.1
2595	62%	-2.0	3.8
2600	65%	-1.9	4.1
2620	73%	-1.4	4.7
2690	74%	-1.3	4.6

ANT 02			
Frequency (MHz)	3D		
	Efficiency	Avg. Gain	Peak Gain
3300	67%	-1.7	4.4
3400	69%	-1.6	4.4
3500	72%	-1.4	4.0
3550	71%	-1.5	4.0
3600	72%	-1.4	4.5
3700	74%	-1.3	4.9
3800	74%	-1.3	5.2
3900	73%	-1.4	5.8
3980	74%	-1.3	6.1
4000	72%	-1.4	6.0
4100	70%	-1.6	5.1
4200	71%	-1.5	4.6

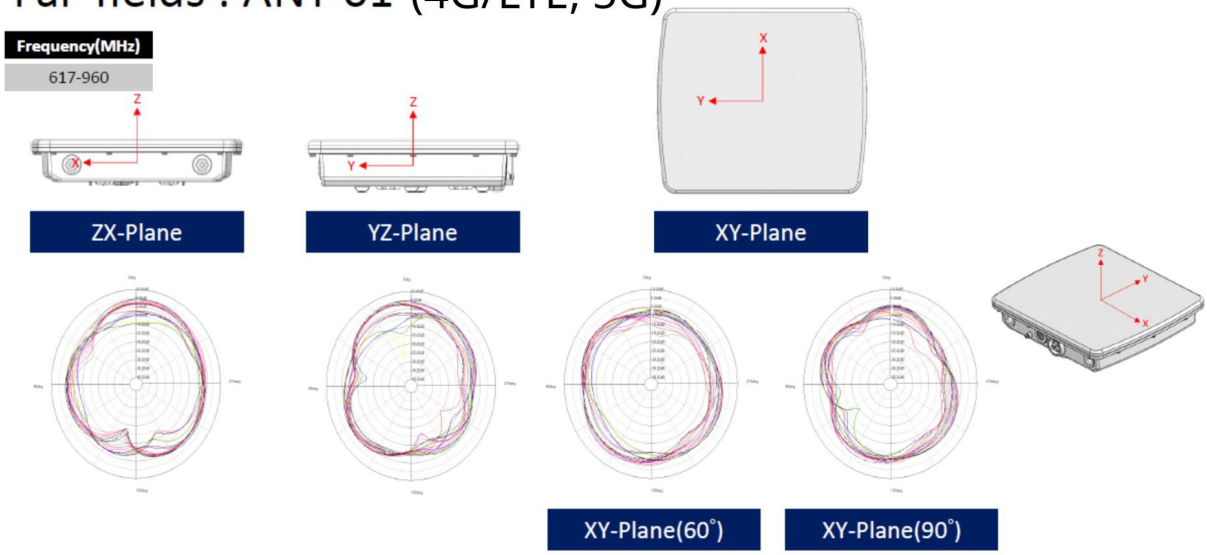
S-Parameters : VSWR – ANT 03 (WiFi)

Frequency(MHz)	ANT 03	Frequency(MHz)	ANT 03
2400	1.7	5150	1.7
2500	2.0	5850	1.8
2400-2500 MAX.	2.1	5150-5850 MAX.	1.8

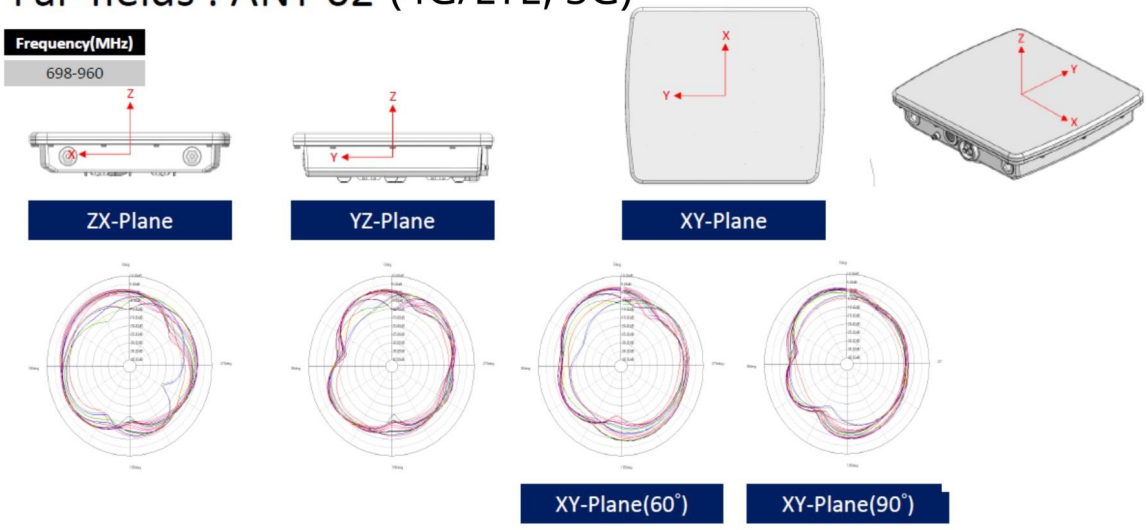


RADIATION PATTERN

Far-fields : ANT 01 (4G/LTE, 5G)



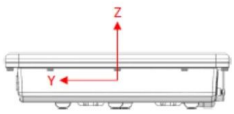
Far-fields : ANT 02 (4G/LTE, 5G)



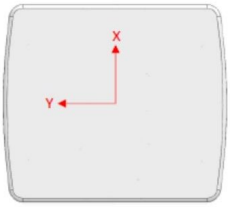
Far-fields : ANT 03 (WiFi)

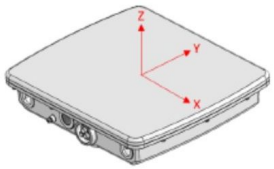
Frequency(MHz)
5150-5850

ZX-Plane

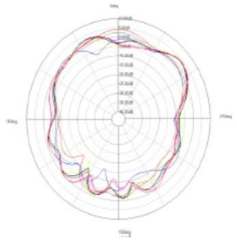


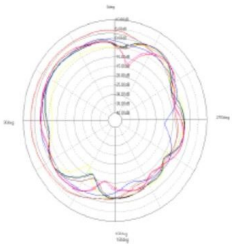
YZ-Plane



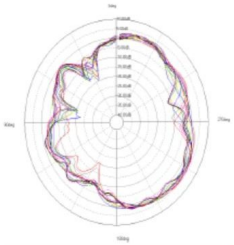


XY-Plane





XY-Plane(60˚)



XY-Plane(90˚)