

Datasheet for
RT-O-ANT-COMBI1
Combined outdoor LTE, WLAN and GNSS antenna.



This ruggedized multi-purpose antenna has LTE, GNSS and WLAN all in the same housing for the most cost effective and swift installation.

This antenna comes with **SMA(male) for cellular**, **SMA(male) for GNSS**, and **RP-SMA(male) for WLAN** and is designed for outdoor installation with its IP66 ingress protection. This antenna is perfect for being used with the RTCU NX-200.

Electrical Characteristics

LTE Cellular Antenna

Item	Specifications	Post Environmental Tolerance
Frequency range	698 MHz ~ 960 MHz / 1710 MHz ~ 2690 MHz	-
V.S.W.R (5m)	< 2.0	-
Gain (Zenith)	2 dBi	-
Impedance	50 Ω	-
Polarization	Linear	-

Dielectric GNSS Antenna

Item	Specifications	Post Environmental Tolerance
Center Frequency (CF)	L1: 1575.42 MHz	± 1 MHz
Band Width	CF ± 5 MHz	-
V.S.W.R	< 1.5	-
Gain (Zenith)	3 dB (max)	-
Polarization	RHCP	-
Impedance	50 Ω	-

GNSS LNA/Filter

Item	Specifications	Post Environmental Tolerance
Gain	28 ± 2 dB	± 2 dB
Noise Figure	< 1.5 dB	-
V.S.W.R	< 2.0	-
DC Voltage	2.2 ~ 5 V	
DC Current	5 ~ 15 mA	

WLAN Antenna

Item	Specifications	Post Environmental Tolerance
Center Frequency	2400~2483.5 MHz	± 8 MHz
V.S.W.R (in BW)	<2. : 1	-
Gain (Zenith)	3 dB	± 0.5 dB
Polarization	Linear	-
Impedance	50 Ω	-

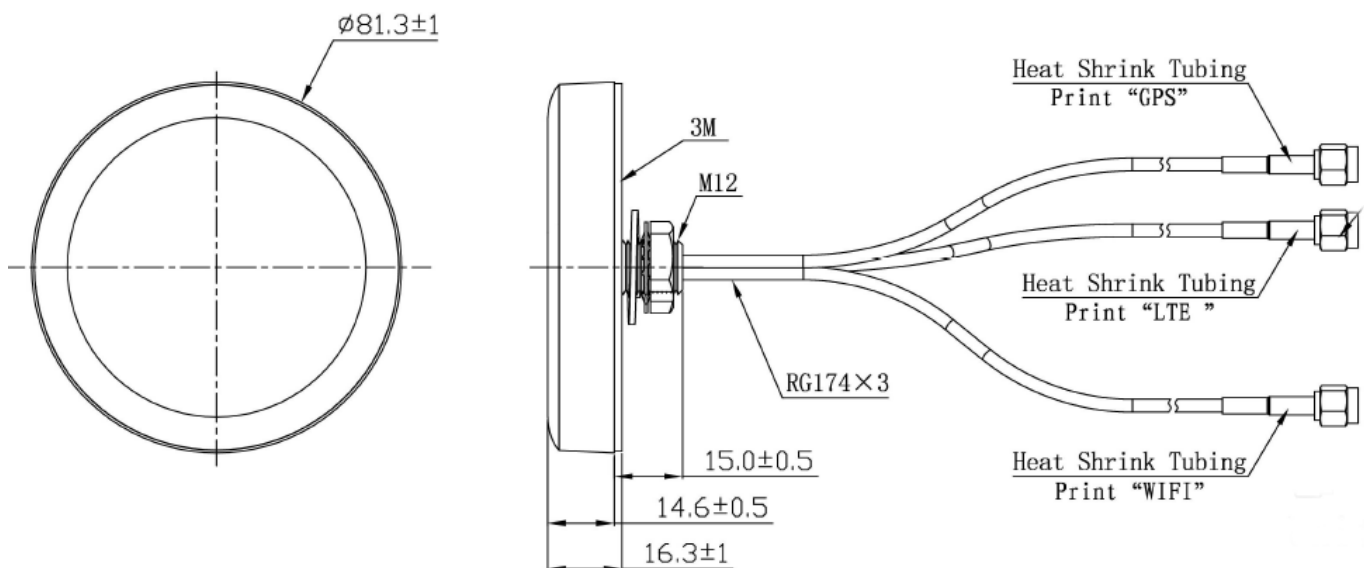
Mechanical Specifications

Item	Specifications
Cable	RG174, 5 meters
Material	ABS
Connector	LTE: SMA male, GNSS: SMA male, WLAN: RP-SMA male
Plastic Housing	Black.
Mounting	M12 screw hole

Environmental Specifications

Item	Specifications
Ingress Protection	IP66 (exclude cable outlet)
Relative Humidity Range	Up to 95 % RH
Operating Temperature Range	-40 °C ~ +85 °C
Vibration	10 to 55 Hz with 1.5 mm amplitude 2 hours
Environmentally Friendly	ROHS Compliant

Dimensions (Unit: mm)

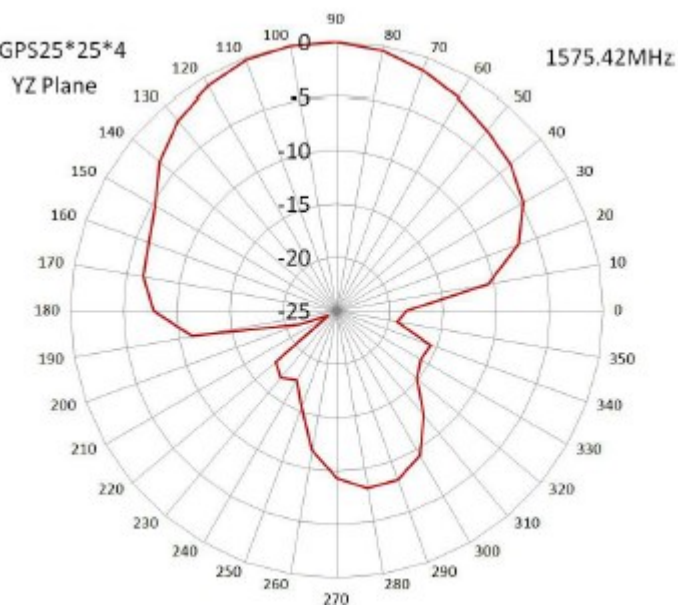
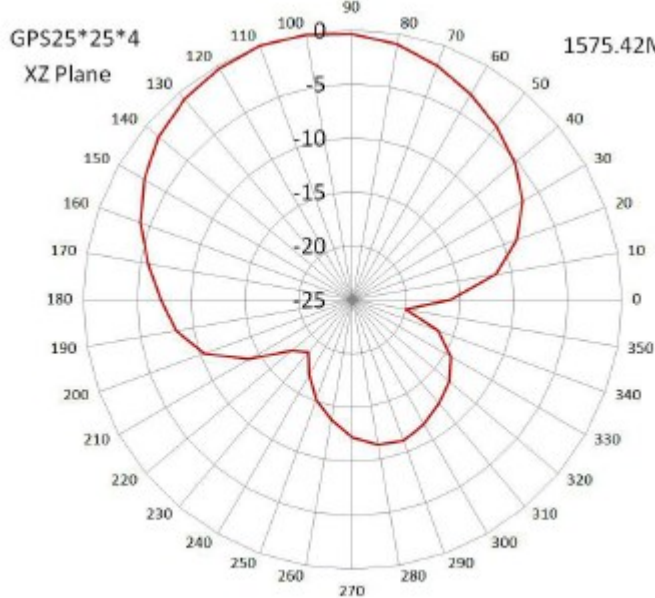
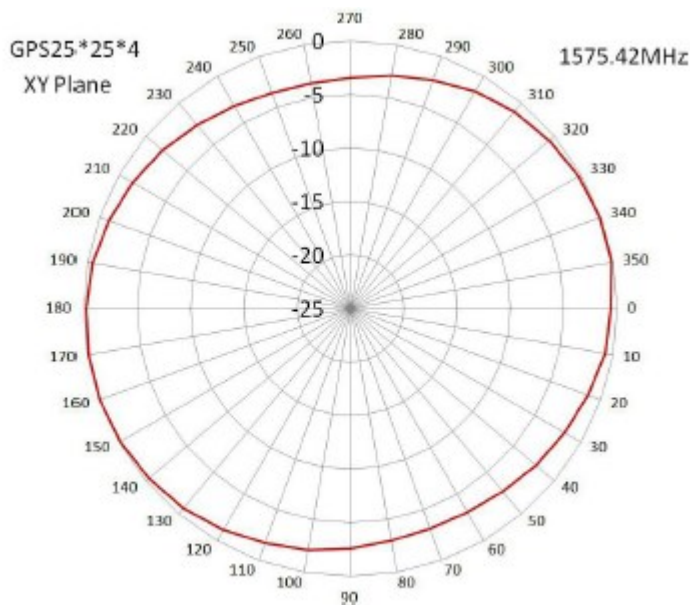


Installation:

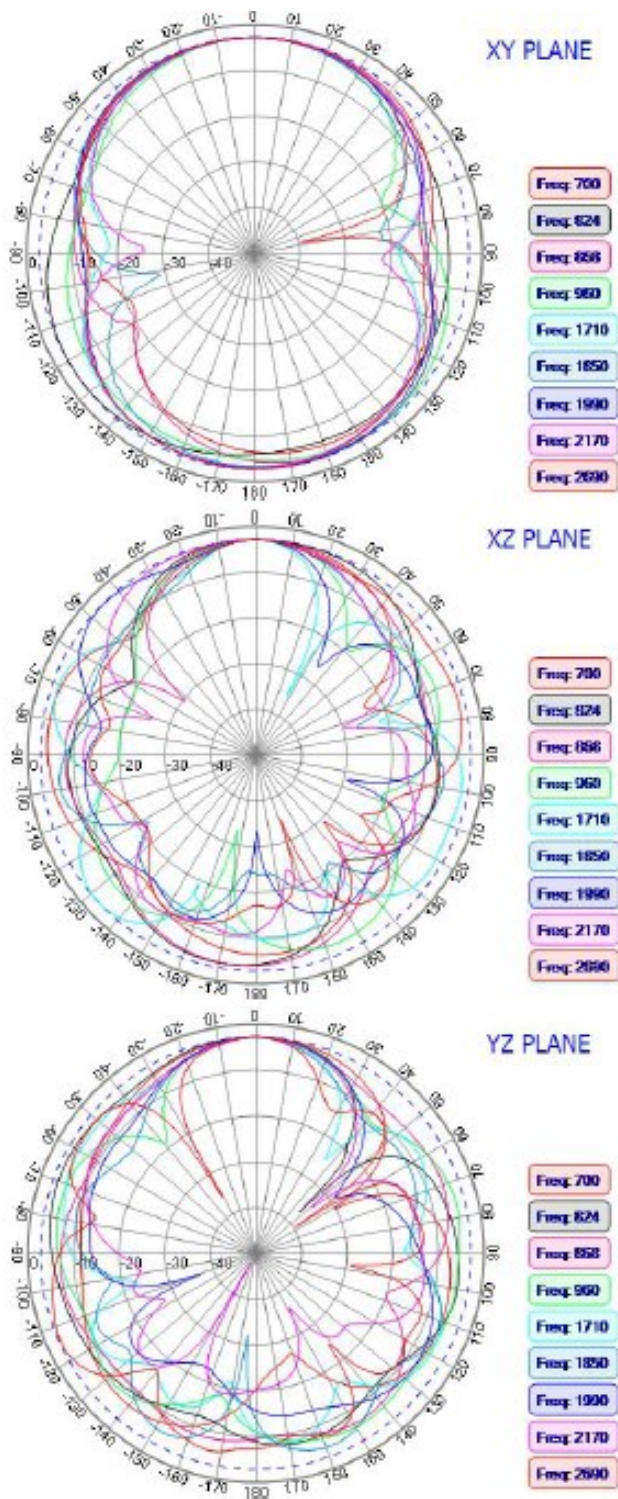
The plastic top must face the sky with the cable entry protected for water/moisture. One-screw mounting with an M12 screw hole. Designed for outdoor use.

Radiation Patterns

GNSS Antenna



Cellular Antenna



WLAN Antenna

