

NETZ 5in1 LTE-MIMO/WIFI-MIMO/GNSS

Part #: 100-00095-01



The NETZ 5 in 1 is a MIMO technology solution by Maxtena that combines two LTE antennas, and two WiFi antennas with GNSS. Our 5 in 1 solution is ideal for high data throughput and streaming, video, industrial and IOT applications.

GNSS Antenna Electrical Specifications

Frequency Range (MHz)	1561 / 1575.42 / 1602 MHz
VSWR	2.0 : 1 Max
Impedance	50 Ohm
Polarization	Linear
Gain @ Zenith	3 dBi Typ. @1561 MHz 3 dBi Typ. @1575 MHz 3.5 dBi Typ. @1602 MHz

LNA Electrical Properties

Frequency Range (MHz)	1561 / 1575.42 / 1602 MHz
VSWR	2.0 : 1 Max
Impedance	50 Ohm
Antenna Gain (@3.3V)	28 dB Typ. / 25 dB Min
DC Power Input	3~5 V
Noise Figure	1.5 dB Typ.
Power Consumption (@3.3V)	9 Typ. mA

LTE MIMO1 Antenna Electrical Specifications

Frequency Range (MHz)	698~960 / 1710~2170 / 2300~2690 MHz
VSWR	4.0 : 1 Max
Impedance	50 Ohm
Peak Gain	4.0 dBi Typ. @698~960 MHz 6.0 dBi Typ. @1710~2170 MHz 5.0 dBi Typ. @2300~2690 MHz
Average Efficiency	698~960 MHz > 40% 1710~2170 MHz > 40% 2300~2690 MHz > 50%

LTE MIMO2 Antenna Electrical Specifications

Frequency Range (MHz)	698~960 / 1710~2170 / 2300~2690 MHz
VSWR	4.0 : 1 Max
Impedance	50 Ohm
Peak Gain	4.0 dBi Typ. @698~960 MHz 6.0 dBi Typ. @1710~2170 MHz 5.0 dBi Typ. @2300~2690 MHz
Average Efficiency	698~960 MHz > 40% 1710~2170 MHz > 50% 2300~2690 MHz > 50%

WIFI MIMO1 Antenna Electrical Specifications

Frequency Range (MHz)	2400~2500 / 5150~5850 MHz
VSWR	2.0 : 1 Max
Impedance	50 Ohm
Peak Gain	5.0 dBi Typ. @2400~2500 MHz 8.0 dBi Typ. @5150~5850 MHz
Average Efficiency	2400~2500 MHz > 60% 5150~5850 MHz > 50%

WIFI MIMO2 Antenna Electrical Specifications

Frequency Range (MHz)	2400~2500 / 5150~5850 MHz
VSWR	2.0 : 1 Max
Impedance	50 Ohm
Peak Gain	5.0 dBi Typ. @2400~2500 MHz 8.0 dBi Typ. @5150~5850 MHz
Average Efficiency	2400~2500 MHz > 60% 5150~5850 MHz > 50%

Mechanical Specifications

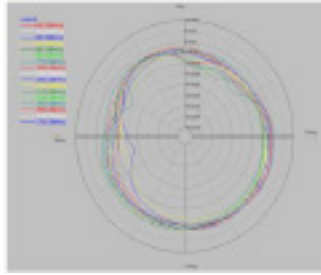
Antenna Dimensions (mm)	Diameter 141.98 x (h) 66.5 mm
Mounting Function	Permanent Mount
Operating Temperature	-40 °C +85 °C
Housing Material & Color	PC+ABS & Black
Cable	RG-174 (GNSS) / CFD-200 (LTE) / CFD-200 (WIFI)
Cable Length	1 Meter
Connector	SMA / FAKRA or customer specification
Waterproof	IPX7

Radiation Specifications

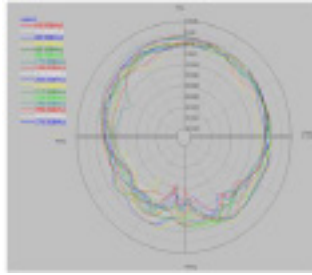
LTE MIMO1 / LTE MIMO2 / WIFI MIMO1 / WIFI MIMO2 / GNSS

LTE MIMO1

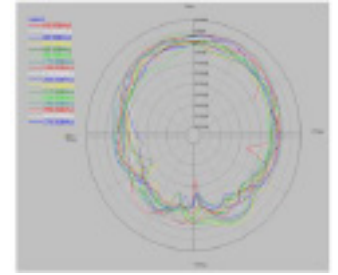
X-Y



X-Z

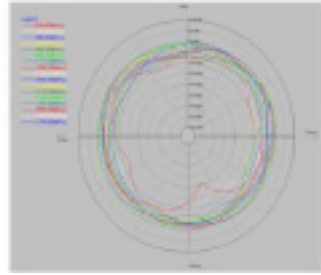


Y-Z

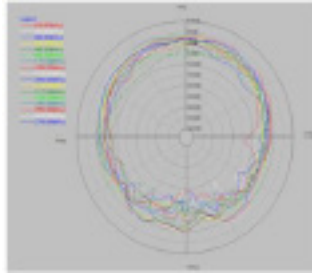


LTE MIMO2

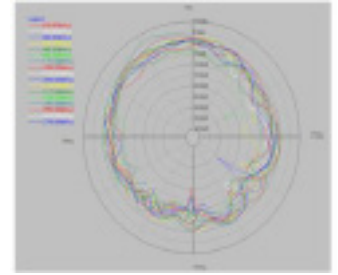
X-Y



X-Z

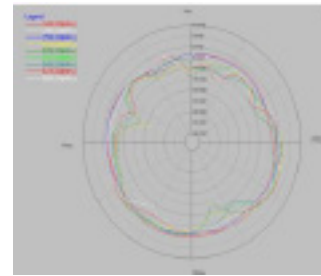


Y-Z

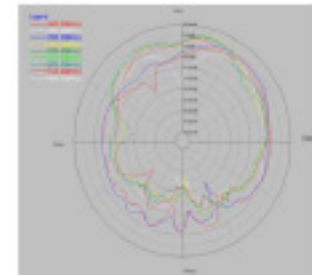


WIFI MIMO1

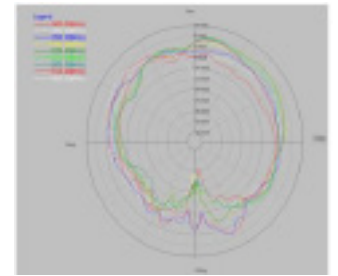
X-Y



X-Z

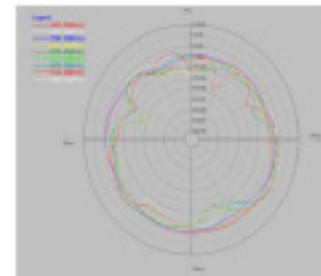


Y-Z

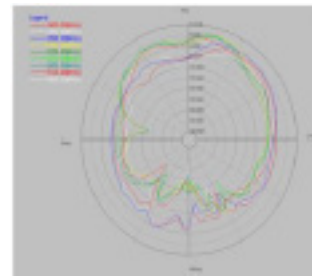


WIFI MIMO2

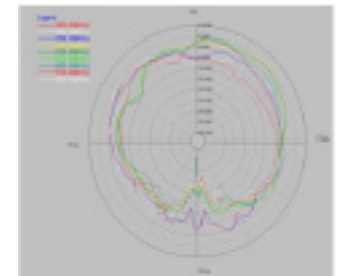
X-Y



X-Z

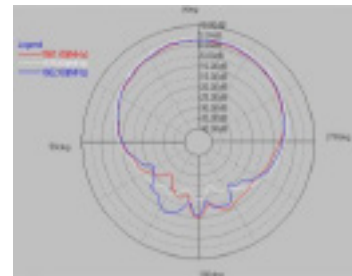


Y-Z

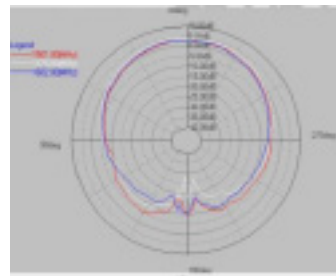


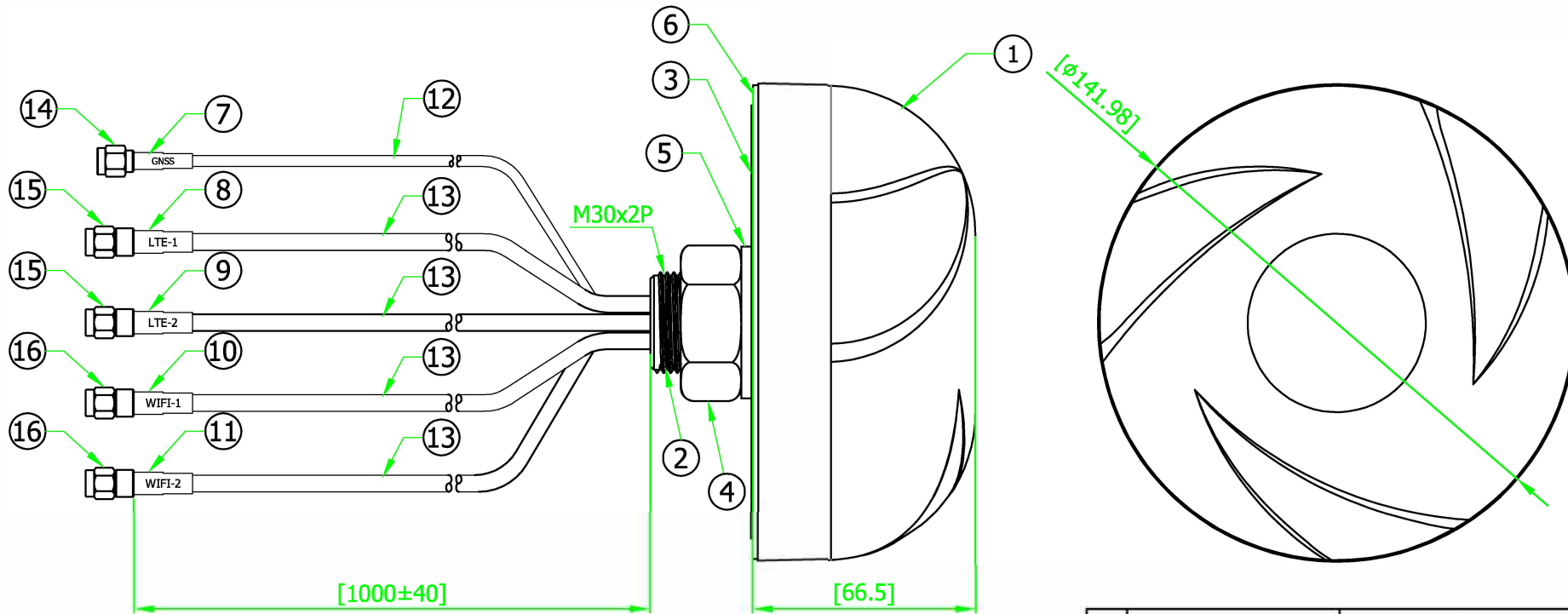
GNSS

X-Z



Y-Z





GNSS Active Antenna:
Frequency: 1561/1575.42/1602 MHz.
LTE MIMO Antenna:
Frequency: 698~960/1710~2170/2300~2690 MHz.
Wi-Fi MIMO Antenna:
Frequency: 2400~2500/5150~5850 MHz.
Waterproof level: IPX7

Note: Critical To Function Dimension Are Mark With [X...]

16	Connector	RP-SMA(M) for CFD-200	1	Gold Plated
15	Connector	SMA(M) for CFD-200	1	Gold Plated
14	Connector	SMA(M) for RG-174	1	Gold Plated
13	Cable	CFD-200	1	Black
12	Cable	RG-174	4	Black
11	H.S Tube(CFD-200)	Heat Shrink Tube(WIFI-2)	1	Yellow on Black
10	H.S Tube(CFD-200)	Heat Shrink Tube(WIFI-1)	1	Yellow on Black
9	H.S Tube(CFD-200)	Heat Shrink Tube(LTE-2)	1	Red on white
8	H.S Tube(CFD-200)	Heat Shrink Tube(LTE-1)	1	Red on white
7	H.S Tube(RG-174)	Heat Shrink Tube(GNSS)	1	Blue on white
6	Waterproof Rubber	Silicone Rubber	1	Black
5	Washer	φ45*3.0t mm	1	Ni Plated
4	Hexagon NUT	M30*2P,T=18mm	1	Ni Plated
3	Black Foam Adhesive	3M 9448HK+CR4305 T=2	1	White Liner
2	Antenna Base	Zinc Alloy	1	Ni Plated
1	Antenna Housing	PC+ABS	1	Black
NO	DESCRIPTION		Q'TY	REMARK

CUSTOMER'S SINGATURE

XX.	±5.0	APPROVED
X.	±2.0	
.X	±1.0	CHECKED
.XX	±0.5	
.XXX	±0.1	DRAWING
⊕		

CUSTOMER:

PART NO :

PARTNAME : 5 in 1 Antenna

P/N :

REV UNIT FILE :

A mm SHEET : 1/1

MAXTENA
WIRELESS INNOVATIONS COMPANY