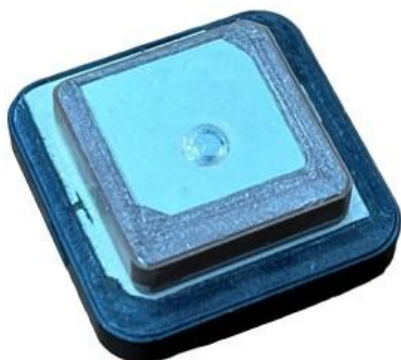


Description: 18184+25254 GNSS&L2L5
Stack Patch Antenna

PART NUMBER : ANT1825BS0XTGN25S

Features:

- Size : Stack 18x18x4+25x25x4mm
- High radiation efficiency
- Combining GNSS and L2L5 bands
- Pin-solder process
- RoHS compliant



Applications:

- GNSS and L2L5 system
- Navigation device
- Telematics box
- Fleet management

In the effort to improve our products, we reserve the right to make changes judged to be necessary.

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For more information:



Description: 18184+25254 GNSS&L2L5
Stack Patch Antenna

PART NUMBER : ANT1825BS0XTGN25S

ELECTRICAL SPECIFICATIONS

Working Frequency	L5 : 1176 MHz
	L2 : 1227 MHz
	GNSS-Beidou : 1561 MHz
	GNSS-GPS : 1575 MHz
Gain(Peak)	GNSS-Glonass : 1602 MHz
	L5: 2.3 dBi
	L2 : 2.8 dBi
	GNSS Beidou : 3.4 dBic
Gain(Average)	GNSS GPS : 3.6 dBic
	GNSS Glonass : 4.2 dBic
	L5: -1.84 dB
	L2 : -1.54 dB
Polarization	GNSS Beidou : -1.77 dB
	GNSS GPS : -1.48 dB
	GNSS Glonass : -1.06 dB
	L5 & L2 : LP
Axial Ratio	GNSS : RHCP
	GNSS Beidou $\leq$ 11 dB
	GNSS GPS $\leq$ 13 dB
	GNSS Glonass $\leq$ 19 dB
Impedance	50 Ω
Operating Temperature	-40 ~ 105 °C

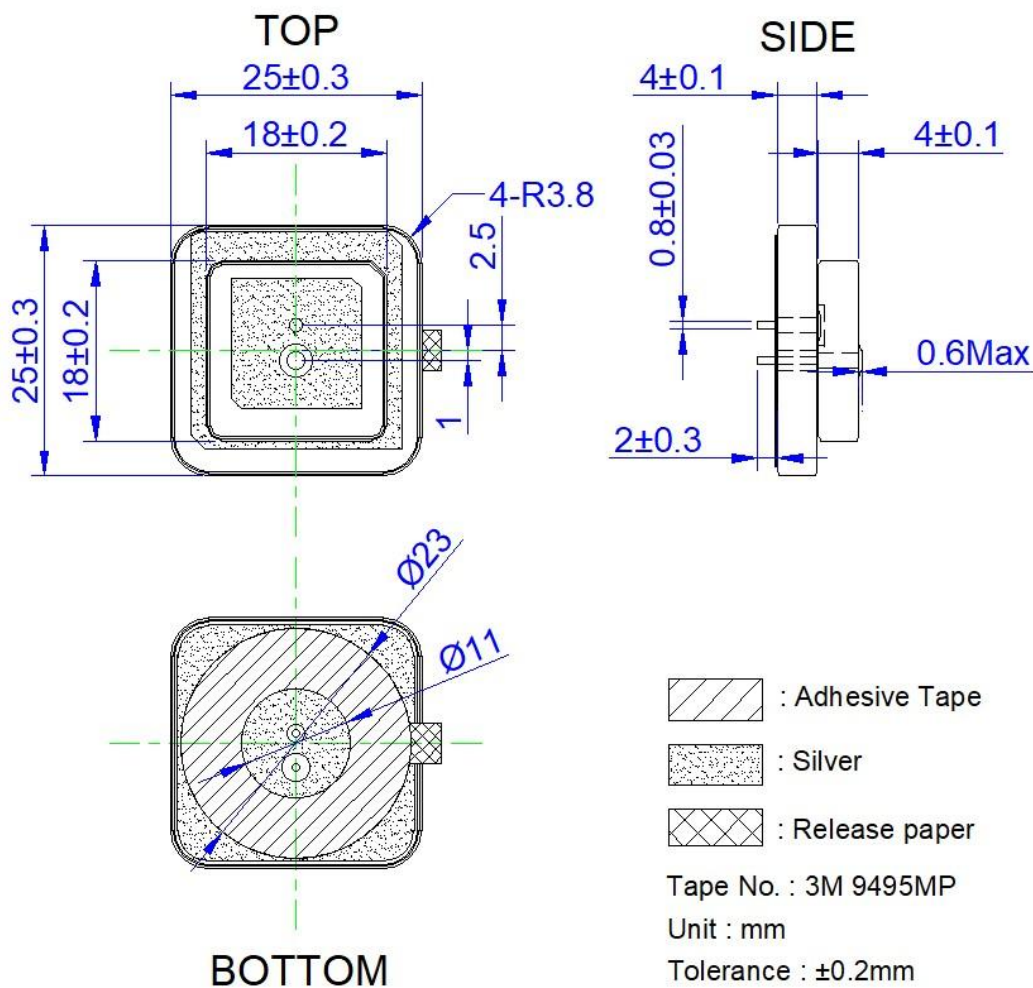
NOTE

1. Based on 70×70 mm² square ground plane.
2. Centre frequency will be offset to working frequency while changes of customer's housing and ground plane.

Description: 18184+25254 GNSS&L2L5
Stack Patch Antenna

PART NUMBER : ANT1825BS0XTGN25S

MECHANICAL DRAWING

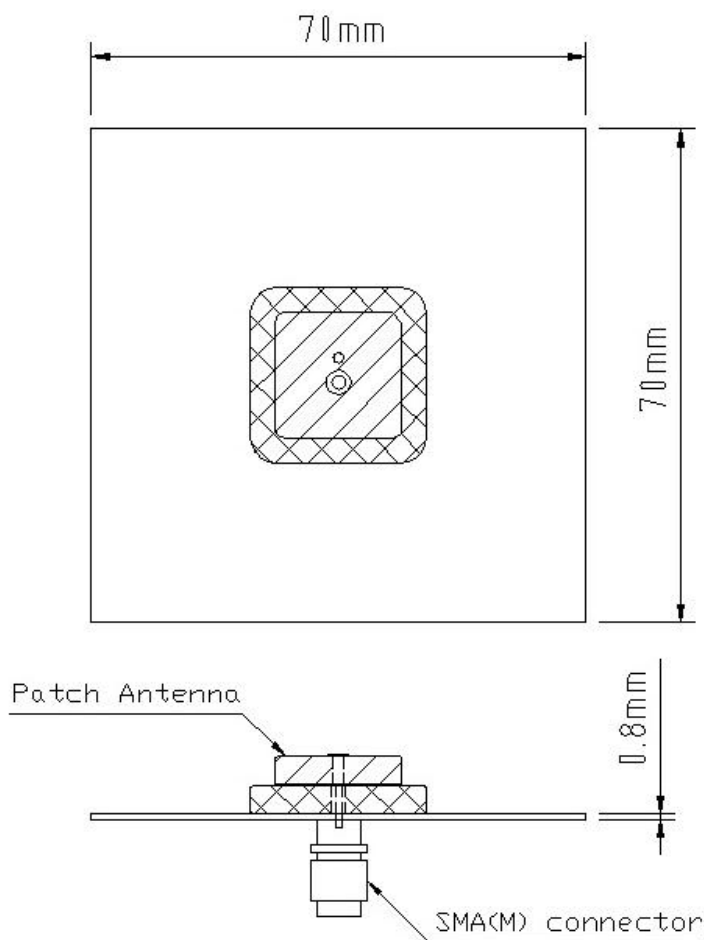


Position	Dimension	Working Band	Feed
Upper	18x18x4 mm	GNSS (1561+1575+1602MHz)	Single Feed
Bottom	25x25x4 mm	L5 & L2 (1176MHz & 1227MHz)	Single Feed

Description: 18184+25254 GNSS&L2L5
Stack Patch Antenna

PART NUMBER : ANT1825BS0XTGN25S

REFERENCE DESIGN OF EVALUATION BOARD



Ground Plane Size: 70x70 mm²

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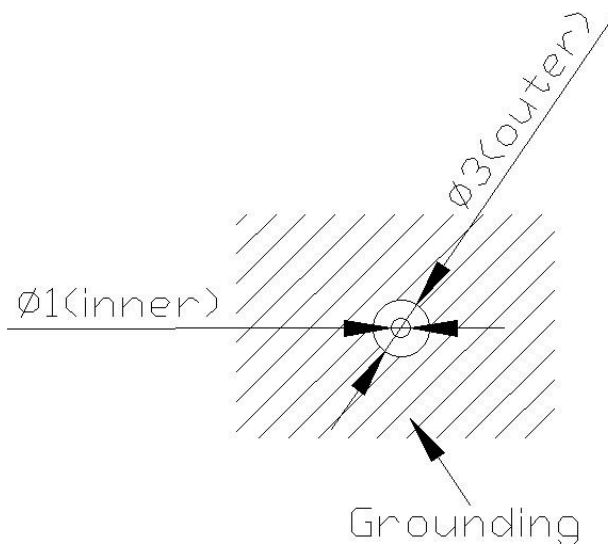
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Description: 18184+25254 GNSS&L2L5
Stack Patch Antenna

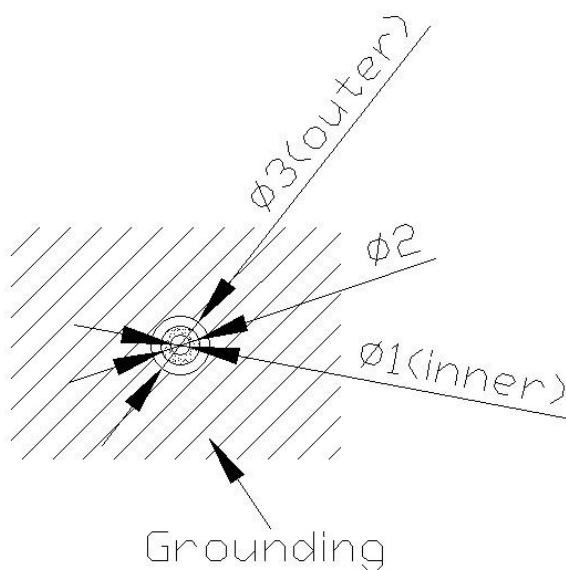
PART NUMBER : ANT1825BS0XTGN25S

FOOTPRINT

Top View



Bottom View



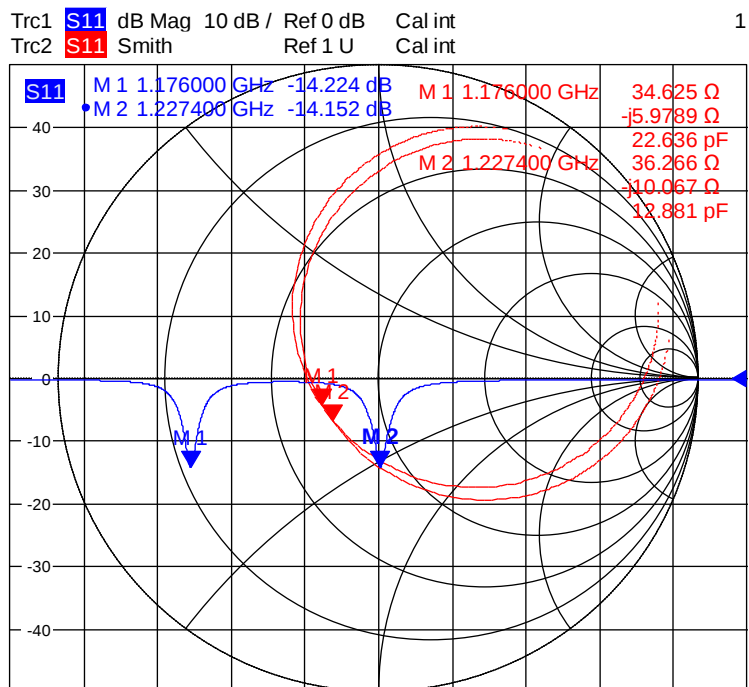
 : Pin feed soldering pad
 : Grounding
 Unit : mm

Description: 18184+25254 GNSS&L2L5
Stack Patch Antenna

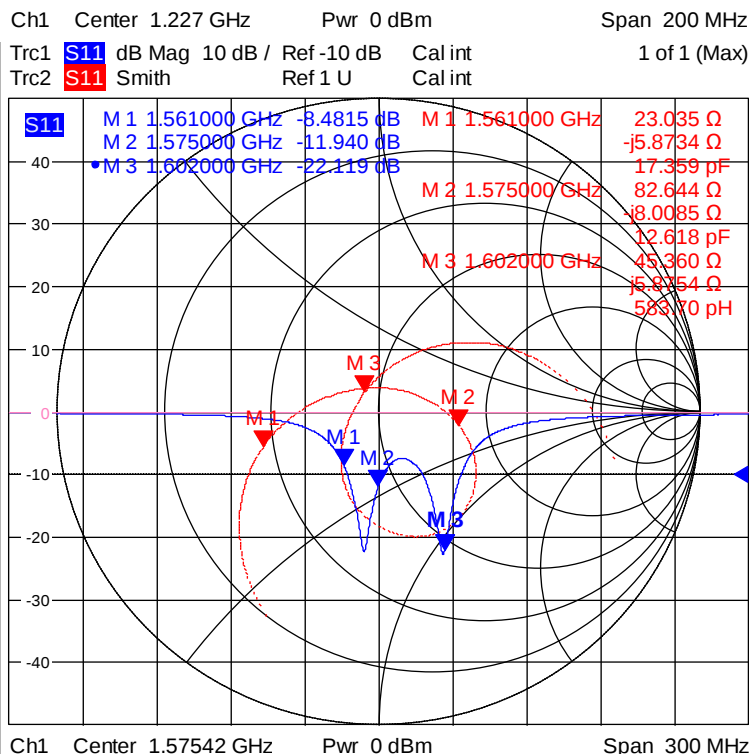
PART NUMBER : ANT1825BS0XTGN25S

RETURN LOSS

L2 & L5



GNSS



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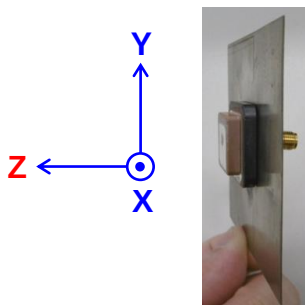
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Description: 18184+25254 GNSS&L2L5
Stack Patch Antenna

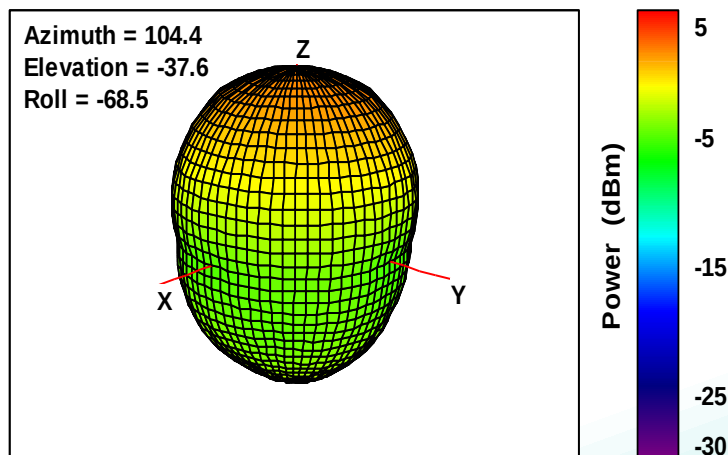
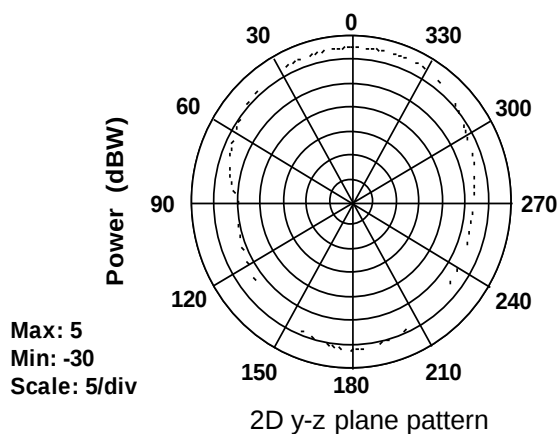
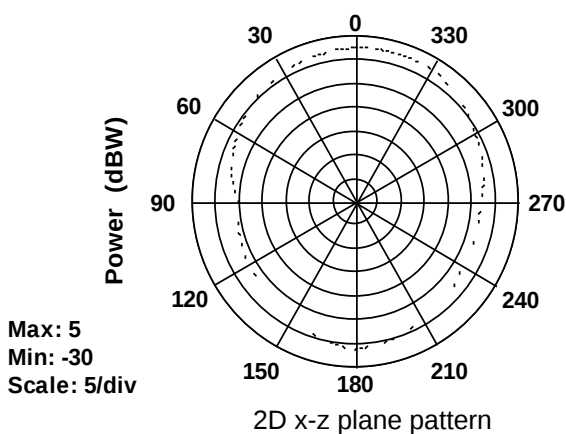
PART NUMBER : ANT1825BS0XTGN25S

RADIATION PATTERN



Evaluation board and XYZ direction

L5-1176MHz



In the effort to improve our products, we reserve the right to make changes judged to be necessary.

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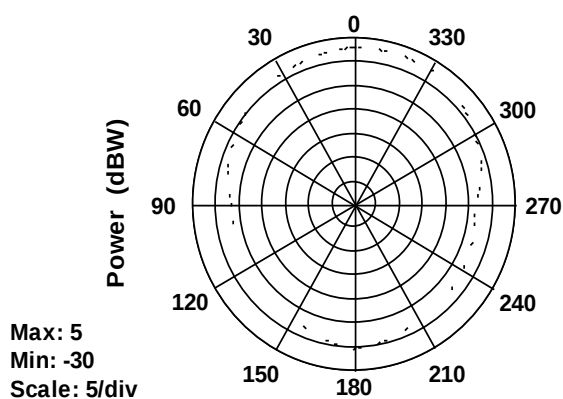
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Description: 18184+25254 GNSS&L2L5
Stack Patch Antenna

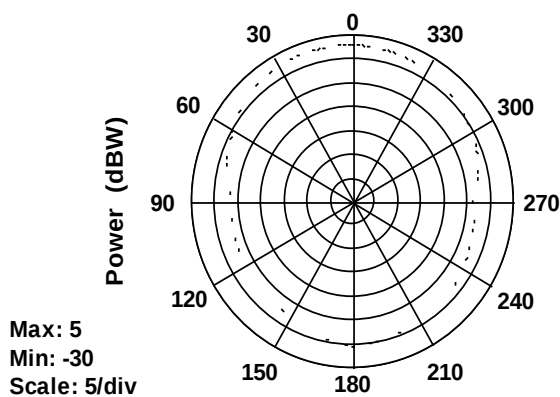
PART NUMBER : ANT1825BS0XTGN25S

RADIATION PATTERN

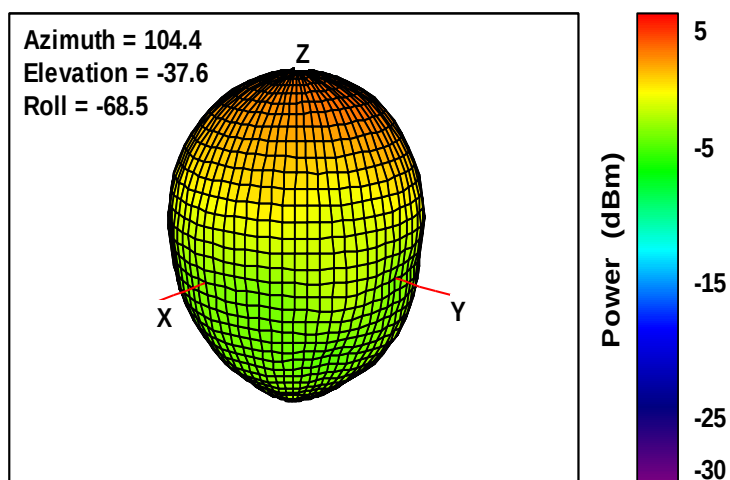
L2-1227MHz



2D x-z plane pattern



2D y-z plane pattern



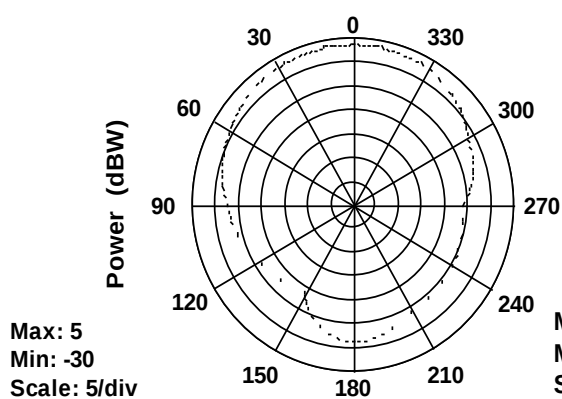
3D radiation pattern

Description: 18184+25254 GNSS&L2L5
Stack Patch Antenna

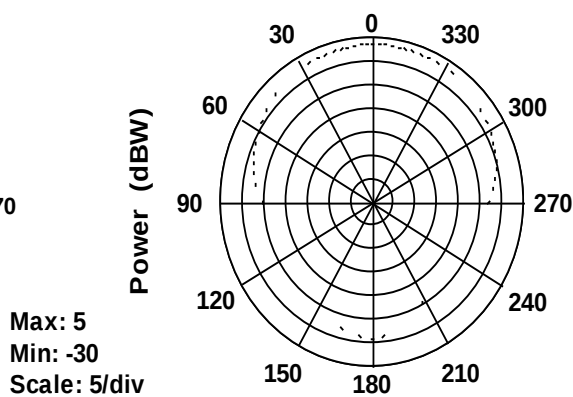
PART NUMBER : ANT1825BS0XTGN25S

RADIATION PATTERN

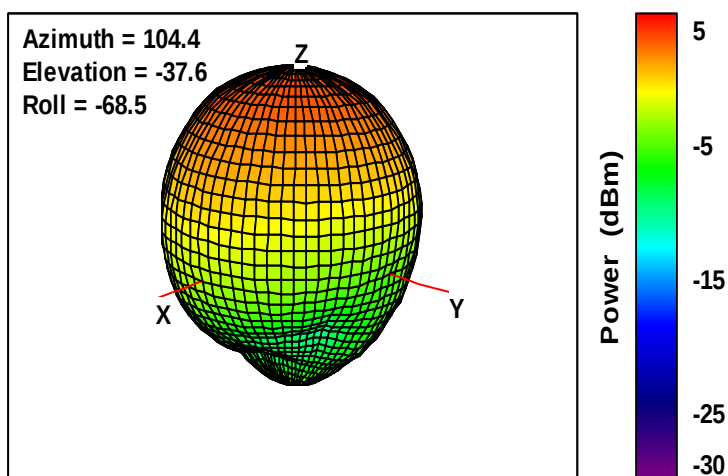
GNSS-1561MHz



2D x-z plane pattern



2D y-z plane pattern



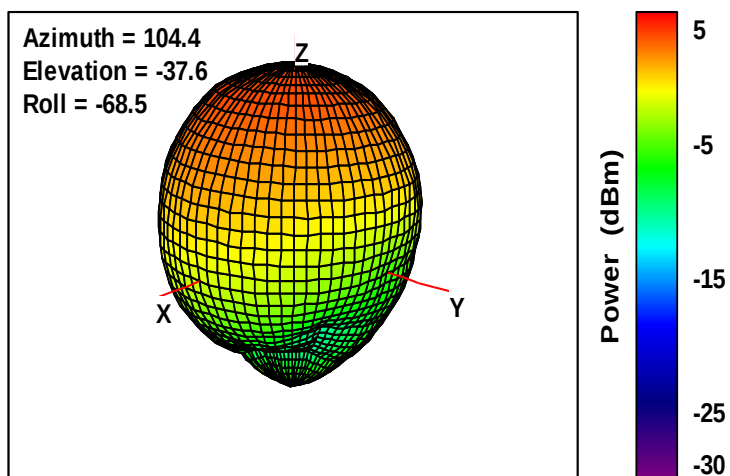
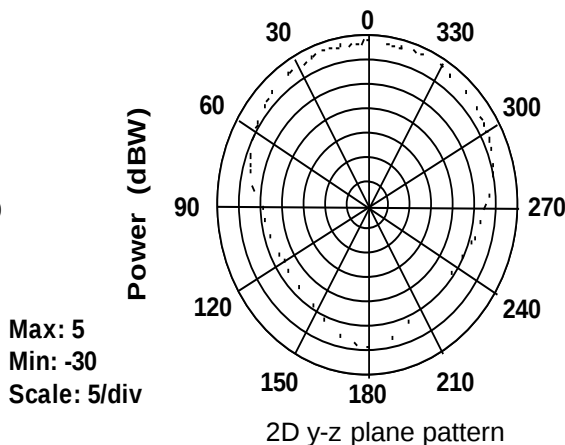
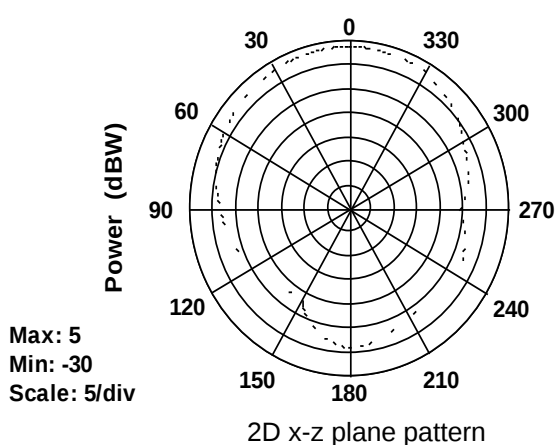
3D radiation pattern

Description: 18184+25254 GNSS&L2L5
Stack Patch Antenna

PART NUMBER : ANT1825BS0XTGN25S

RADIATION PATTERN

GNSS-1575MHz



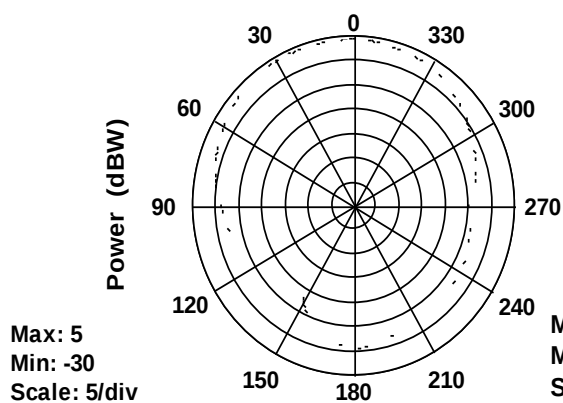
3D radiation pattern

Description: 18184+25254 GNSS&L2L5
Stack Patch Antenna

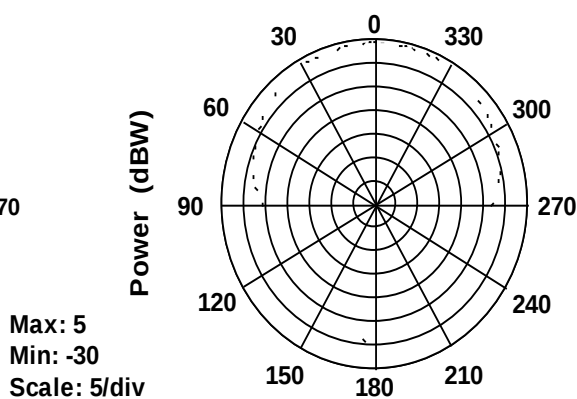
PART NUMBER : ANT1825BS0XTGN25S

RADIATION PATTERN

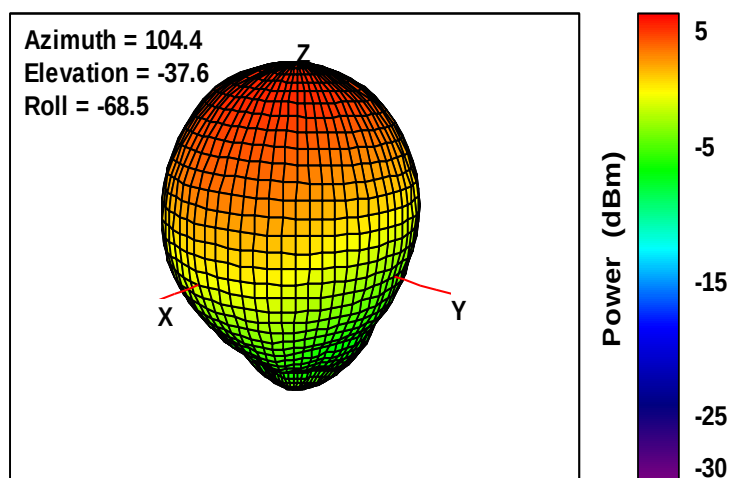
GNSS-1602MHz



2D x-z plane pattern



2D y-z plane pattern



3D radiation pattern

Description: 18184+25254 GNSS&L2L5
Stack Patch Antenna

PART NUMBER : ANT1825BS0XTGN25S

REVISION HISTORY

Revision	Date	Description
Version 1	Jun. 24	- New issue