

OEM GNSS Antenna HX-CSX338A

HX-CSX338A is a embedded full frequency GNSS antenna covering GPS, GLONASS, BDS, GALILEO, and QZSS. It is also compatible with the 4G, WIFI. Meeting the demand for multi-system compatibility in current survey devices. It can be widely used in various applications such as geodetic surveying, marine surveying, channel surveying, dredging surveying, seismic monitoring, bridge deformation monitoring, landslide monitoring, and port container operations.

HIGHLY INTEGRATED ANTENNA FOR EASY INTEGRATION

HX-CSX338A integrates GNSS antenna and 4G into one compact enclosure, greatly simplifying RTK integration. Deep optimization has been carried out for the isolation between antennas of various systems, systematically addressing the electromagnetic compatibility issues that have long troubled RTK receivers.

STABLE PHASE CENTER FOR ROBUST POSITIONING PERFORMANCE

It features multi-point feeding capability, guaranteeing a reliable phase center for millimeter positioning accuracy.

● Key Features

- Supports GPS, GLONASS, Beidou, Galileo, QZSS
- Supports 4G,WIFI
- Anti-electromagnetic interference, tracking in complex environments
- Powerful system compatibility, easy for machine integration

TRACKING IN COMPLEX ENVIRONMENTS

This antenna exhibits superior high gain performance with ultralow signal loss, ensuring reliable satellite signal tracking. It also delivers wide beam width that covers wide frequencies with high marginal gain. These features guarantee robust signal availability even in low elevation,

RELIABLE STRUCTURE FOR STABLE PERFORMANCE

This antenna uses air dielectric and low-loss microwave board materials. The overall weight is reduced, the structure is more robust, and the electrical performance becomes more stable and reliable.

STRONG ANTI-INTERFERENCE PERFORMANCE

The advanced LNA (Low Noise Amplifier) excels in improved signal filtering and out-of-band rejection, perfectly restraining unwanted electromagnetic interferences. With strong multi-path reduction capacity for strong anti-interference performance, consistent and reliable GNSS signals can be achieved even under complicated environments such as power grids, communication base stations and broadcast stations.

Specifications

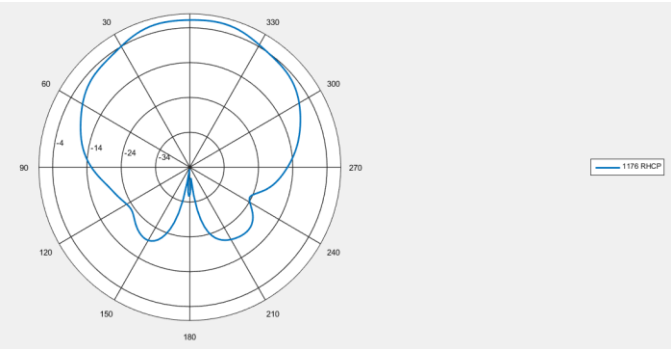
PERFORMANCE	
Signal Received	GPS L1/L2/L5 BDS B1I/B2I/B3I/B1C/B2a/B2b GLONASS L1/L2/L3 GALILEO E1/E5a/E5b/E6 QZSS L1、L2、L5、L6 IRNSS L5 L-Band 4G WIFI(2.4GHz&5.8GHz) BT (2.4G)
Nominal Impedance	50 欧姆
Polarization	RHCP
Axial Ratio	≤3dB
Azimuth Coverage	360°
Azimuth Coverage	≤2.0
Peak Gain	GNSS: 5dBi WIFI/BT: 0.5dBi 4G: 0.5dBi
Phase Center Deviation	±2mm

LOW NOISE AMPLIFIER	
LNA Gain	30±2dB
Noise Figure	≤2dB
VSWR	≤2.0
Passband Ripple	±2dB
Passband Ripple	+3.3 ~ +12VDC
Operation Current	≤45mA
Group Delay Ripple	≤5ns
MECHANICAL	
Dimensions	Φ113.8*H13.7mm
Connector	GNSSMMCX-KE-3 4G&WIFI&BT: IPEX
ENVIRONMENTAL	
Operating Temperature	-40℃ ~ +85℃
Storage Temperature	-55℃ ~ +85℃
Humidity	95% 不冷凝

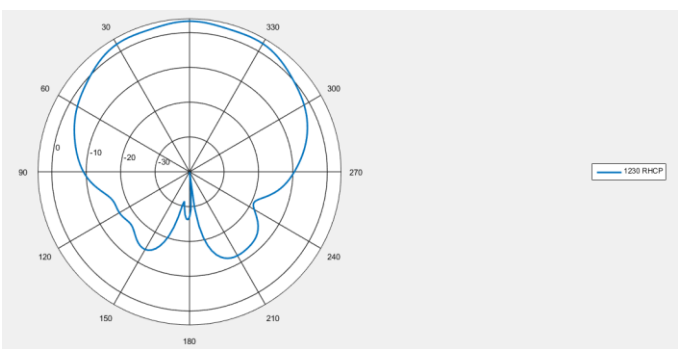
OEM GNSS Antenna HX-CSX338A

GNSS Antenna Performance

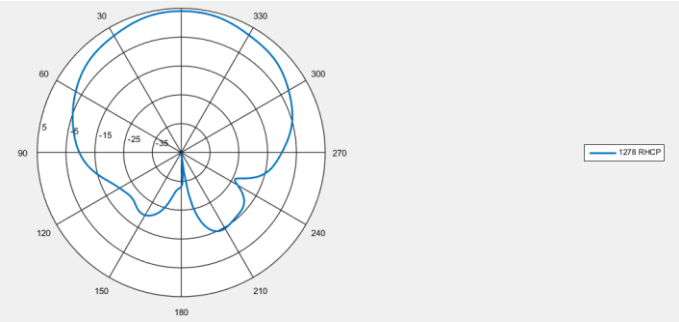
Frequency (MHz)	1176	1206	1227	1268	1559	1561	1575	1606
Gain (dBi)	3.0	4.0	4.5	4.4	4.0	4.2	4.6	4.1



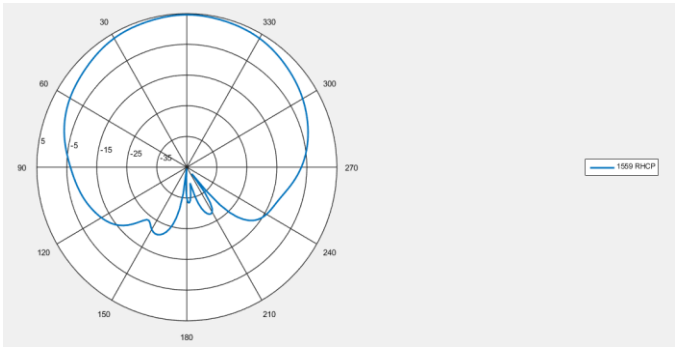
1176MHz



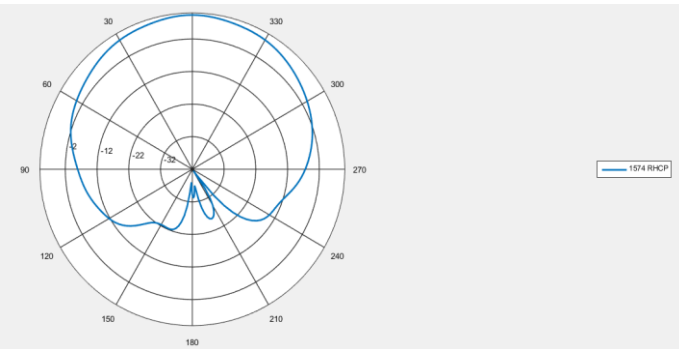
1230MHz



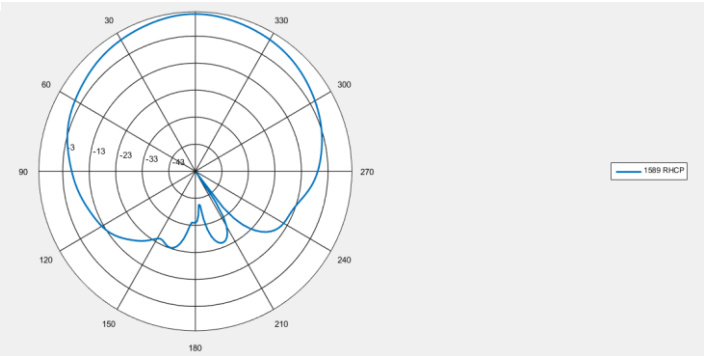
1268MHz



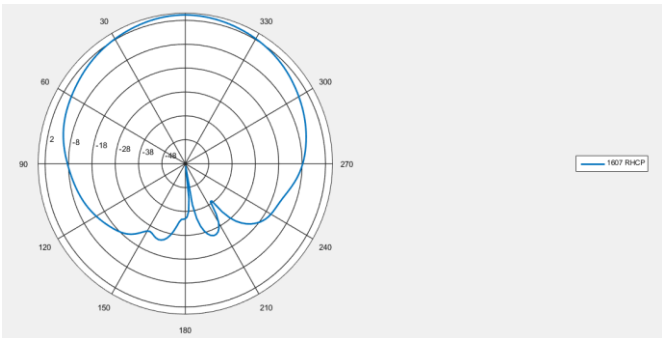
1559MHz



1575MHz



1590MHz

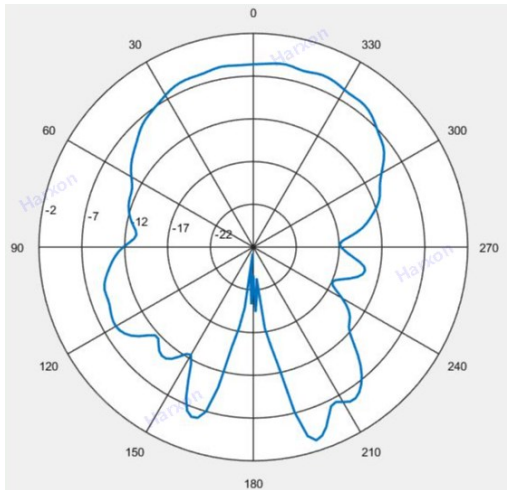


1610MHz

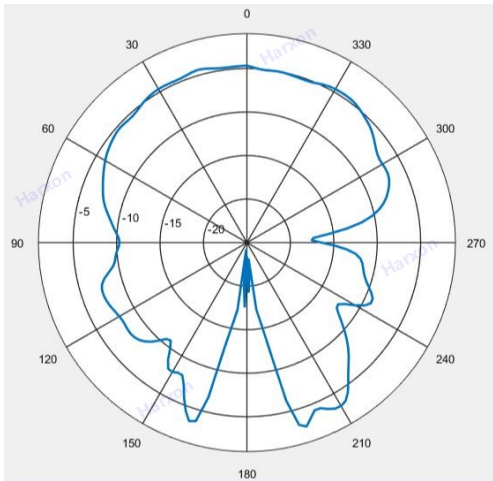
OEM GNSS Antenna HX-CSX338A

4G Antenna Performance

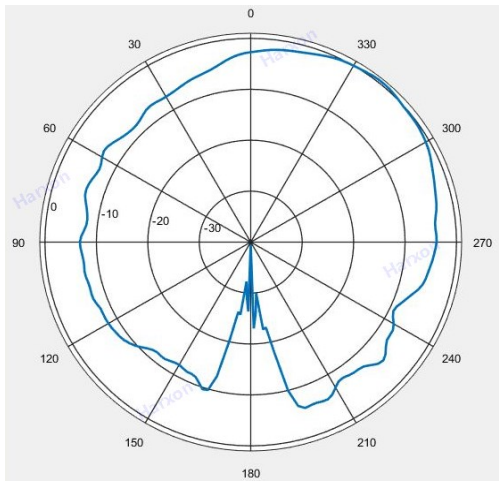
Frequency (MHz)	820	890	960	1710	1910	2110	2410	2450	2480	2690
Gain (dBi)	-2.1	0.1	-0.5	0.5	-0.3	0.4	-1.3	-1.5	-1.4	-1.9



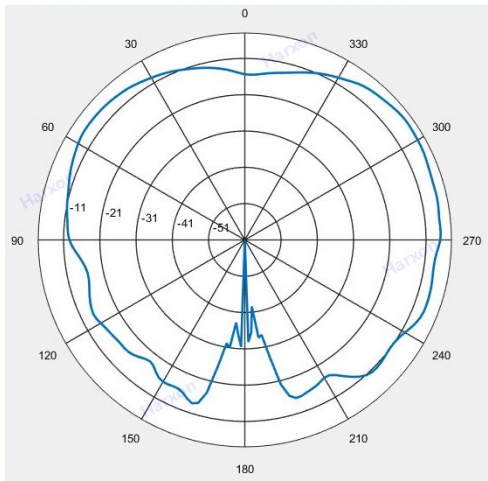
820MHz



960MHz

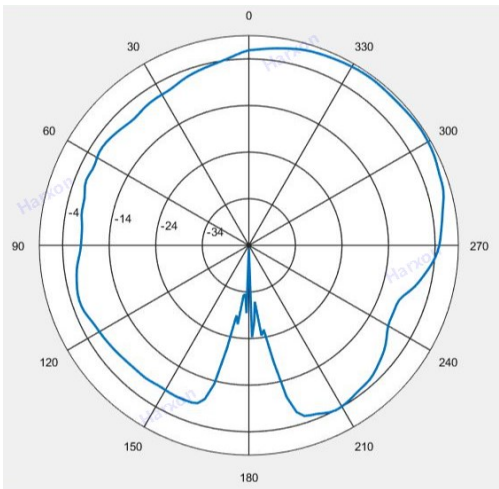


1710MHz

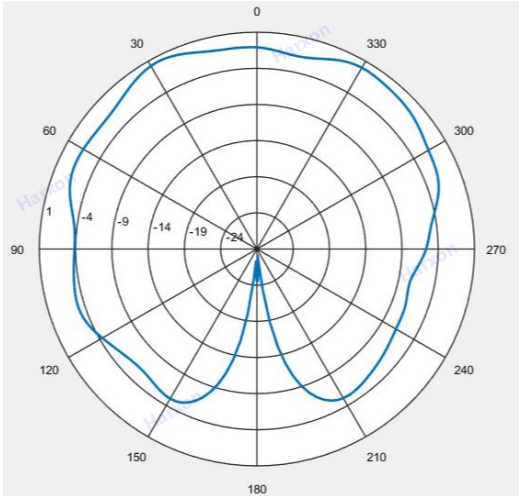


1910MHz

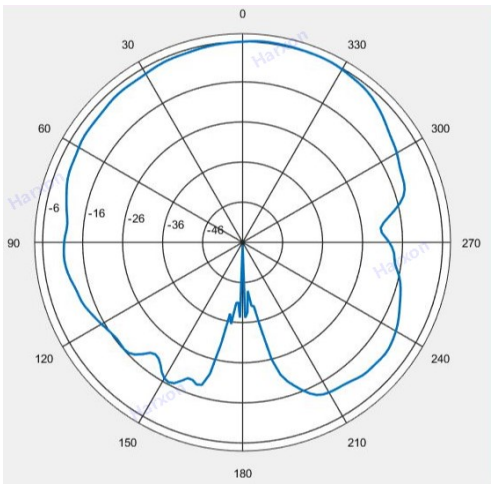
OEM GNSS Antenna HX-CSX338A



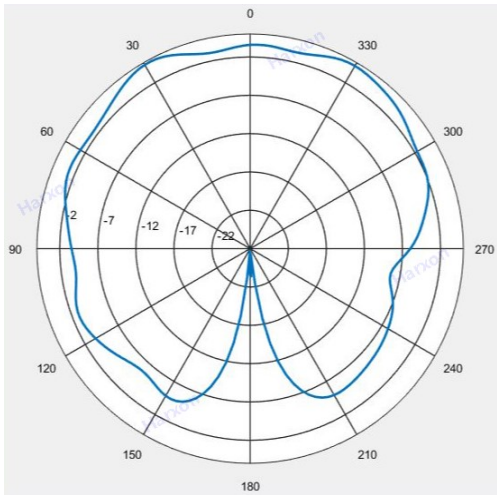
2110MHz



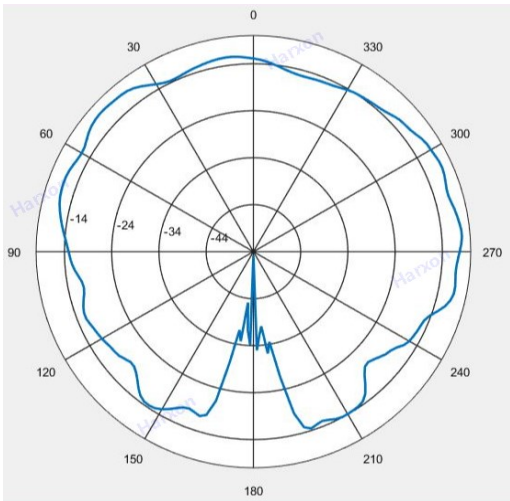
2410MHz



2450MHz



2480MHz

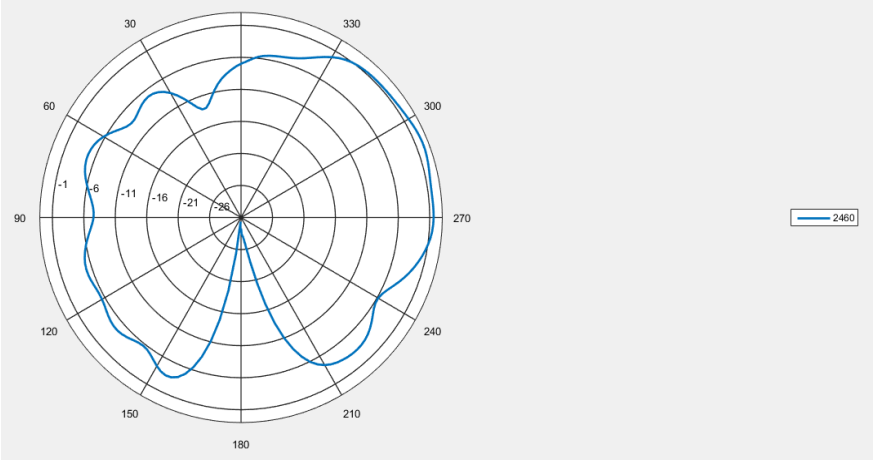


2690MHz

OEM GNSS Antenna HX-CSX338A

WIFI Antenna Performance

Frequency (MHz)	2410	2450	2480	5150	5550	5850
Gain (dBi)	0.2	0.5	0.4	-1.8	-2.2	-2.5

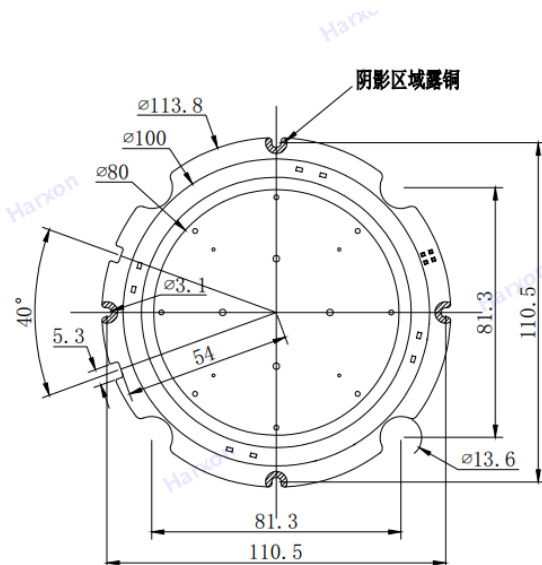


2450MHz

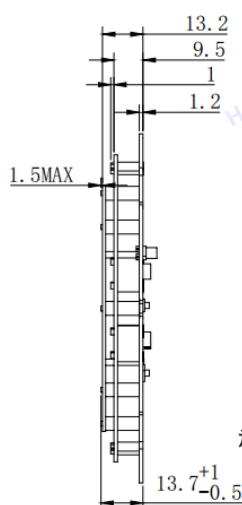
OEM GNSS Antenna HX-CSX338A



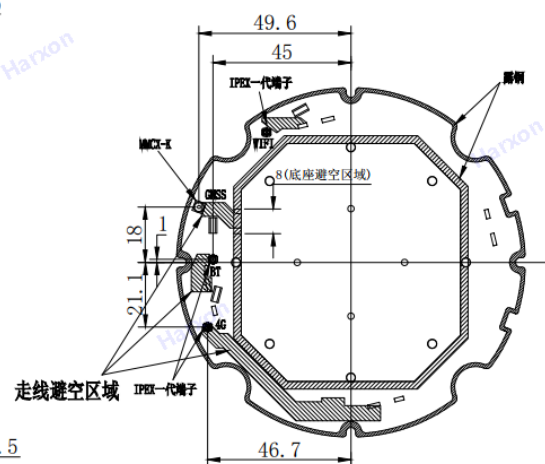
Structure & Phase Center Drawing (mm) (Undeclared Tolerance: ±0.3mm)



TOP VIEW



SIDE VIEW



BOTTOM VIEW

Harxon Corporation

Address: Room 501, Han's Laser Technology Centre, Shennan Ave No.9988, Nanshan District, Shenzhen, Guangdong Province, China