

## HIGH PRECISION GNSS ANTENNA FOR SURVEYING APPLICATIONS

### Product Description

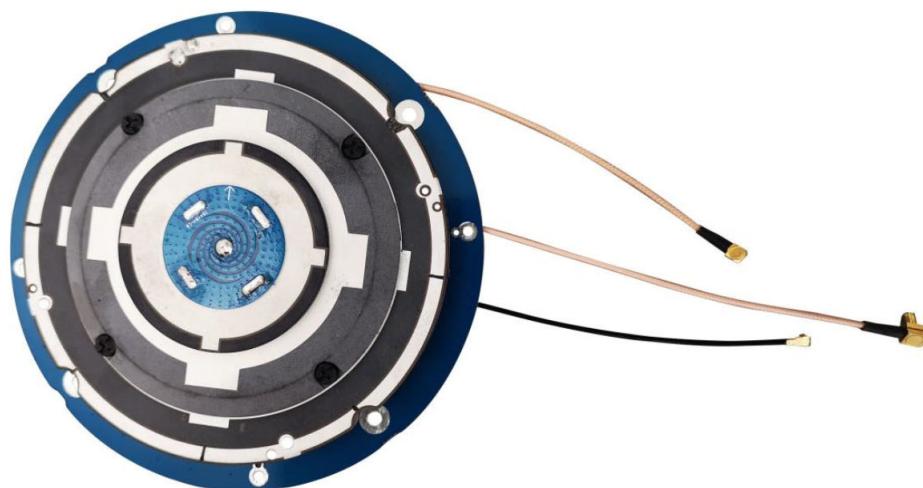
MG4N03A adopts a multi-feed point design to ensure the coincidence of the antenna phase center and the geometric center, providing measurement accuracy. Built-in low-noise amplifying module, using pre-filter and multi-stage filter to filter out interference signal, to ensure normal operation in harsh electromagnetic environment. Small size and light weight, effectively reduce the weight of the equipment.

### Application Field

The antenna can be used with a variety of satellite navigation receivers, and is widely used in fields such as geodetic surveying and mapping, channel surveying and mapping, precision agriculture and marine surveying, and can also be selected for use in the military field according to application conditions.

### KEY FEATURES

- Comprehensive GNSS support, including GPS, GLONASS, Beidou and Galileo
- Robust low-elevation satellite tracking
- Adopts multi-feed point design, ensures the performance of right-hand circular polarization and phase center, reduces the influence of measurement error
- An internal multi-path-rejection board eliminates multi-path interference errors
- High Gain, good reception for low-elevation satellite signals, ensure the signal can still be received normally in some severely occluded occasions



# GEODETIC ANTENNA MG4N03A



## PERFORMANCE

<b>Signal Received</b>		<b>Band Flatness</b>	±2dB
GPS	L1/L2/L5	<b>Noise Figure</b>	≤2.0dB
GLONASS	L1/L2	<b>Operation Voltage</b>	3.3-12 VDC
BDS	B1/B2/B3	<b>Operation Current</b>	≤45mA
GALILEO	E1/E2/E5a/E5b	<b>Differential Transmission Delay</b>	≤5ns
BT/WIFI			
Mobile Communication 4G			
<b>VSWR</b>	≤2.0	<b>MECHANICAL</b>	
<b>Maximum Gain</b>		<b>Dimensions</b>	Φ127.5×27mm
GNSS	5.5dBi	<b>Connector</b>	
BT/WIFI	1dBi	GNSS	MCX-JW
Mobile Communication 4G	0.5dBi	BT/WIFI	IPEX
<b>Antenna AR</b>	≤3.0dB	Mobile Communication 4G	MMCX-JW
<b>Phase Center Error</b>	±2mm	<b>Weight</b>	≤230g
<b>Polarization</b>	RHCP	<b>ENVIRONMENTAL</b>	
<b>Port Impedance</b>	50Ω	<b>Temperature</b>	
<b>LNA Gain</b>	40±2dB	Operating	-40℃ to +85℃
		Storage	-55℃ to +85℃
		<b>Humidity</b>	95% non-condensing

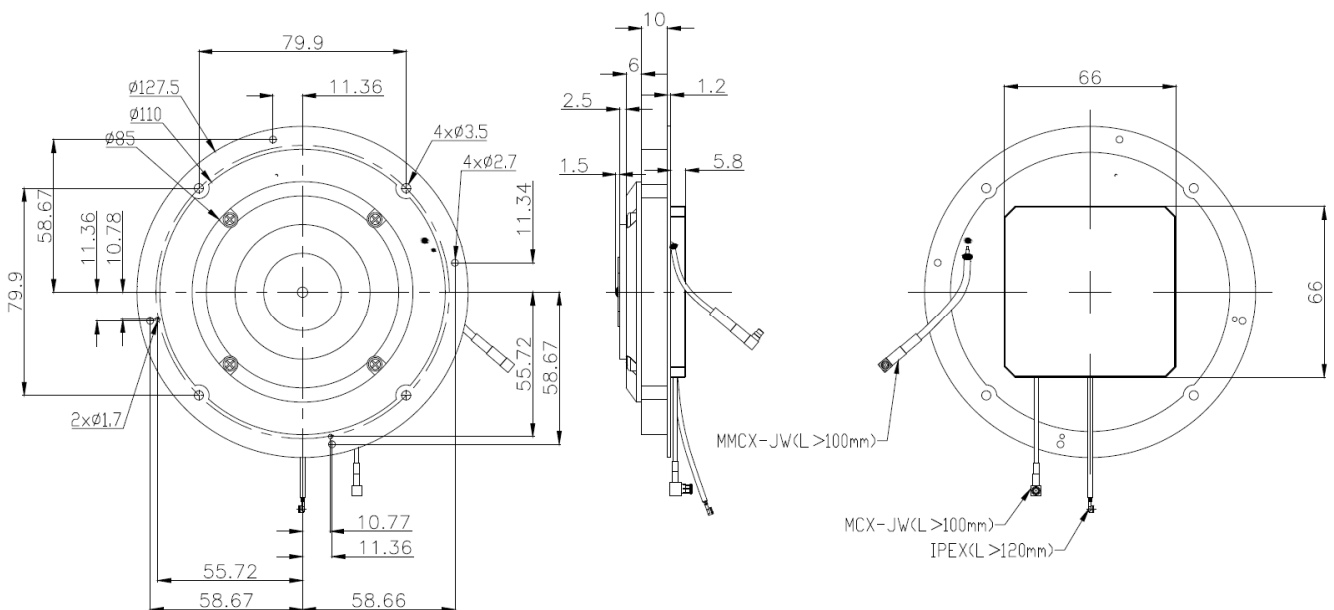
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## Structure & Phase Center Drawing (mm)



Undeclared tolerance: ±0.3mm