

HIGH PRECISION GNSS ANTENNA FOR SURVEYING APPLICATIONS

Product Description

MG4N52A is a built-in four-star full-frequency measurement antenna. It adopts multi-feed point design to ensure that the phase center of the antenna coincides with the geometric center. It is compact in size and light in weight, effectively reducing 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

- Support GPS L1 / L2 / L5 / L_Band
GLONASS L1/L2/L3 BDS B1/B2/B3
GALILEO E1/ E5a/E5b/E6 BT/WIFI
Mobile communication 4G signal
reception
- 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.
- High gain, miniaturization, high
sensitivity, multi-system
compatibility and high reliability



GEODETIC ANTENNA MG4N52A



PERFORMANCE

Signal Received

GPS	L1/L2/L5/L_Band
GLONASS	L1/L2/L3
BDS	B1/B2/B3
GALILEO	E1/E2/E5a/E5b/E6
BT/WIFI/4G	

VSWR ≤ 2.0

Maximum Gain

GNSS	5.5dBi
BT/WIFI	1dBi
4G	1dBi

Antenna AR ≤ 3.0 dB

Phase Center Error ± 2 mm

Polarization RHCP

Port Impedance 50 Ω

LNA Gain 45 ± 2 dB

Band Flatness ± 2 dB

Noise Figure ≤ 2.0 dB

Operation Voltage 3.3-12 VDC

Operation Current ≤ 45 mA

Differential Transmission Delay ≤ 5 ns

MECHANICAL

Dimensions $\Phi 110 \times 110 \times 24.5$ mm

Connector

GNSS MMCX-K

BT/WIFI/4G IPEX

Weight ≤ 280 g

ENVIRONMENTAL

Temperature

Operating -40°C to $+85^{\circ}\text{C}$

Storage -55°C to $+85^{\circ}\text{C}$

Humidity 95% non-condensing

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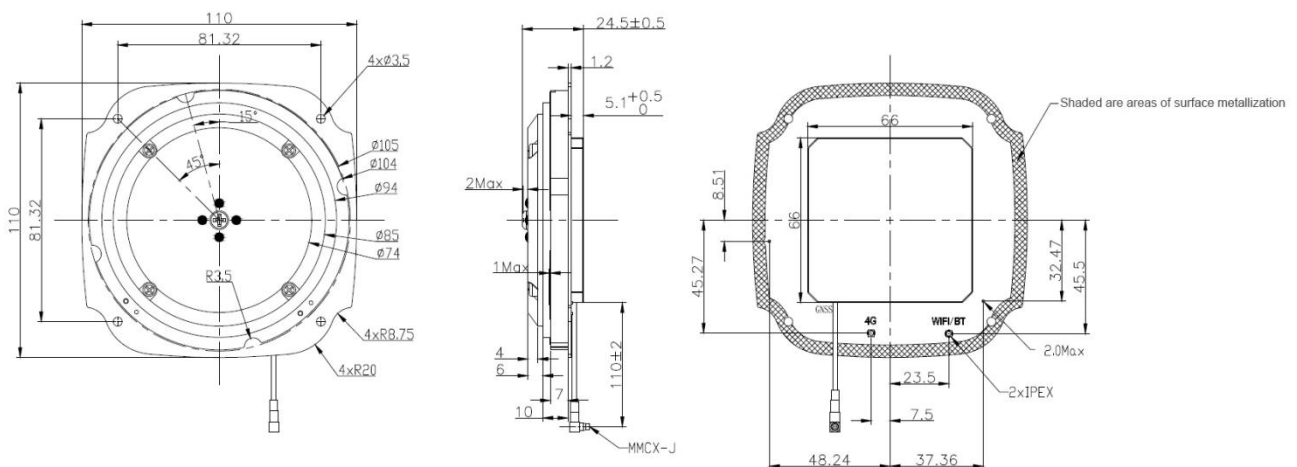
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Structure & Phase Center Drawing (mm)



Undeclared tolerance: ± 0.3 mm