

# Antenna

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## GNSS Infrastructure



# Hardware Description

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## Antenna

Accuracy & Performances

The CHC GNSS antenna series provides a high-accuracy and cost-effective solution to demanding positioning applications such as geodetic reference station, marine survey, machine control, GIS and mapping when both performances and reliability are required.

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### A220

#### GPS + GLONASS + BDS + Galileo

The A220GR is a rugged GNSS antenna designed for positioning and navigation applications using the CHC N and P GNSS Sensors series.



### C220GR2

#### GPS + GLONASS + BDS + Galileo

The C220GR2 is a high performance GNSS choke ring antenna optimised for reference station applications.

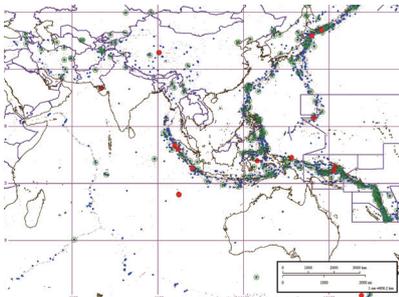


# Core Technology

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## Applications



# Specifications

	A220GR	C220GR2
<b>Antenna type</b>	Geodetic	Choke ring (Radome)
<b>Frequency</b>	GPS L1 + L2 GLONASS L1 + L2 BDS GALILEO SBAS	GPS L1 + L2 + L5 GLONASS L1 + L2 + L3 BDS B1, B2, B3 GALILEO E1, E5A, E5B, E6 SBAS
<b>LNA gain</b>	40 dB	50 dB
<b>LNA voltage</b>	3 V DC to 18 V DC	3 V DC to 18 V DC
<b>LNA current</b>	≤ 45 mA	≤ 50 mA
<b>Polarization</b>	Right Hand Circular	Right Hand Circular
<b>Axial ratio</b>	≤ 3 dB	≤ 3 dB
<b>Phase center accuracy</b>	± 2 mm	± 1 mm
<b>Impedance</b>	50 Ohms	50 Ohms
<b>VSWR</b>	≤ 2.0	≤ 2.0

	A220GR	C220GR2
<b>Noise</b>	≤ 2 dB	≤ 2 dB
<b>Dimension (D x H)</b>	147 mm x 62 mm (5.8 in x 2.4 in)	322 mm x 261 mm (12.7 in x 10.3 in)
<b>Weight</b>	400 g (14.1 oz)	4.9 kg (173 oz)
<b>RF connector</b>	TNC	TNC
<b>Operating temperature</b>	-40°C to +85°C (-40°F to +185°F)	-40°C to +85°C (-40°F to +185°F)
<b>Threading</b>	5"/8"	5"/8"
<b>Construction</b>	None	Copper alloy
<b>Antenna calibration</b>	None	IGS
<b>Vibration</b>	MIL-STD-810G standard	MIL-STD-810G standard
<b>Ingress protection</b>	IP67 waterproof and dustproof, protected from temporary immersion to depth of 1 m	

\*Specifications are subject to change without notice.



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Shanghai Huace Navigation Technology Ltd.

599 Gaojing Road, Building D  
Shanghai, 201702, China

+86 21 54260273

