CHCNAV

C220GR2

GNSS CHOKE-RING GEODETIC ANTENNA



NAVIGATION &
INFRASTRUCTURE



ACCURACY AND PERFORMANCE

The C220GR2 is a high-performance, multi-constellation GNSS choke ring antenna optimized for GNSS reference station applications and RTK network infrastructures. With exceptional multipath rejection and sub-millimeter phase center accuracy, the C220GR2 provides a durable and cost-effective solution for demanding positioning and navigation applications such as static and real-time geodetic reference stations, surveying, mapping, machine control, GIS and autonomous navigation.

SPECIFICATIONS

System	
Antenna type	Choke ring (Radome)
Frequency	GPS: L1, L2, L5 GLONASS: L1, L2, L3 BDS: B1, B2, B3, B1c, B2a GALILEO: E1, E5A, E5B, E6 QZSS: L1, L2, L5, L6 NavIC: L5 SBAS: L
LNA gain	50 dB
LNA voltage	3 V DC to 18 V DC
LNA current	≤ 50 mA
Polarization	Right Hand Circular
Axial ratio	≤ 2 dB
Phase center accuracy	± 1 mm
Impedance	50 Ohms
VSWR	≤ 2.0

Physical	
Noise	≤ 2 dB
Dimension (D x H)	322 mm x 261 mm (12.7 in x 10.3 in)
Weight	4.9 kg (173 oz)
RF connector	TNC
Operating temperature	-40°C to +85°C (-40°F to +185°F)
Threading	5" / 8"
Construction	Copper alloy
Antenna calibration	IGS
Vibration	MIL-STD-810G standard
Ingress protection	IP67 waterproof and dustproof, protected

* All specifications are subject to change without notice.

©2026 Shanghai Huace Navigation Technology Ltd. All rights reserved. The CHCNAV and CHCNAV logo are trademarks of Shanghai Huace Navigation Technology Limited. All other trademarks are the property of their respective owners. Revision May 2026.

WWW.CHCNAV.COM | MARKETING@CHCNAV.COM

CHC Navigation Headquarter
577 Songying Road, Qingpu District,
Shanghai, China
Marketing@chcnav.com
+86 21 54260273

CHC Navigation Europe Kft
Office Campus, Building A, 6/B Gubacsi Street,
Budapest 1097, Hungary
Europe_office@chcnav.com
+36 20 510 6723