



Mini CORS C50

Mini CORS C50 is a cost-effective and miniaturized GNSS receiver designed for the construction of Beidou ground-based augmentation system, with built-in Linux operating system, completely independent intellectual property development, rich interface types, diverse communication methods, support for large-capacity data storage, and support for a variety of sensors Input is the best choice for the construction of Beidou ground enhancement system.

Linux intelligent system

Linux+Qualcomm MDM9628 Cortex-A7, the intelligent system platform, brings users efficient computing and unlimited expansion of product functions.

Full constellation

The host integrates high-precision positioning module, provides an excellent on board real time navigation solution with high accuracy. All GNSS signals (GPS, GLONASS, BEIDOU, GALILEO, QZSS and SBAS) are included, no additional cost.

Quick positioning function

The first positioning time is short, and the satellite signal can be locked and tracked, which is convenient for users to quickly obtain accurate positioning data for subsequent operation and processing.

Compatible with multiple protocols

Support Ntrip Client/Server/Caster, TCP Client/Server connection, FTP protocol file transfer, HTTP/HTTPS protocol, private network transfer function with protection policy.

Rich interfaces and various communication methods

The host provides Ethernet, WIFI, serial, Bluetooth and mobile network interfaces for customers to choose.

Product Specification

Configure		Content
Hardware Platform		Qualcomm MDM9628 Cortex-A7
Software Platform		Linux
GNSS	GNSS Receiving Frequency	BDS B1I、B2I、B3I、B1C、B2a、B2b* GPS L1 C/A、L1C*、L2P(Y)、L2C、L5 GLONASS L1、L2 Galileo E1、E5a、E5b QZSS L1、L2、L5 SBAS *B2b、L1C Supported after firmware upgrade
	Aisle	1408 Super Channels and Dedicated Quick Capture Engine
	Differential Observation Accuracy (Rms)	10.0cm
	Kinematic Phase Observation Accuracy (Rms)	1.0mm
	Single Positioning Accuracy (Rms)	Horizontal :1.5m vertical : 2.5m
	Rtk Positioning Accuracy (Rms)	Horizontal : 0.8 cm+1ppm vertical : 1.5cm+1ppm
	Static Accuracy (Rms)	Horizontal : ±(2.5mm+1ppm) vertical : ±(5mm+1ppm)
	Time Accuracy (Rms)	20ns (does not include delay caused by RF cables or antennas)
	Positioning Data	NMEA - 0183
	Differential Data	RTCM 3.0 , RTCM3.2 , RTCM3.3
	Storage Format	RINEX, custom
	Data Refresh Rate	1 Hz , 2 Hz , 5 Hz , 10 Hz , 20 Hz
	Receive Data Availability	≥ 98 % (data available/data collected)
	Data Integrity	≥ 98 % (Data collected/Data should be collected)
System Platform	Serial Port	Standard RS 232 interface baud rate Support 9600, 19200, 38400, 115200, 230400bps
	Network Port	Standard RJ45 interface, 10/100Mbps network adaptive
	Network Communication	All Netcom LTE FDD: B1/B3/B5/B8 LTE TDD: B38/B39/B40/B41 TD-SCDMA: B34/B39 CDMA: BCO WCDMA: B1/B8 GSM: 900/1800MHz
	Built-In Storage	32GB , free space 24GB , circular storage, support multi-channel storage
Electrical	Voltage Input	9-24V DC (12V typical)
Characteristics	Power Consumption	1.5W
Physical Properties	Size	135 x 102 x 47 mm
	Weight	≤ 470g
	Protection Class	IP65 (can be upgraded to IP67/IP68, special instructions are required when ordering)
Environmental Characteristics	Operating Temperature	-40~+ 85 °C
	Storage Temperature	-40~+85°C

