



Size(L × W × H): 100 mm × 60 mm × 9 mm

Weight: 45g

K708 GNSS Module

FULL-CONSTELLATION GNSS AND SUPERIOR PERFORMANCE

The K708 is a new generation OEM board designed to work with current constellations, which is also firmware upgradable to track satellite signals of upcoming constellations. With the advanced QUANTUM™ technology, it remarkably improves the stability and reliability of positioning in standalone and RTK modes. Your GNSS solution will never be outdated with the K708 OEM board inside.

ADVANCED HARDWARE STRUCTURE

As the updated version of the K508, the K708 is embedded with more advanced SinoGNSS ASIC Chip, which makes great improvement in positioning performance and power consumption. Integrated with the advanced Microprocessor unit, the K708 is ideal for applications that require higher output data rate.

STRONG COMPATIBILITY

To improve working efficiency and productivity of users, the K708 is designed to be compatible with major GNSS brands from the physical design to data formats. It can also support customized data message when needed.

DESIGNED FOR FLEXIBILITY

The K708 is developed as a multi-functional GNSS product, especially for applications where high-accuracy PVT² is mostly concerned. With 8GB onboard memory, it is able to support years of raw data recording. For the WebServer service, it allows users to configure the K708 board more effectively.

Features

GPS L1/L2/L5, BeiDou B1/B2/B3, GLONASS L1/L2, Galileo E1/E5a/E5b, QZSS

DP-Filter Smooth Function¹

Advanced QUANTUM™ Technology

Support BeiDou Global Signal B1C/B2a

Webserver Service

8 GB Onboard Memory

K708 GNSS Module

K Series GNSS Module

Ver.2020.11.30

Signal Tracking	Channels	496
	GPS	L1 C/A, L2C, L2P, L5
	BeiDou	B1, B2, B3
	BeiDou Global	B1C, B2a
	GLONASS	L1 C/A, L1P, L2 C/A, L2P
	Galileo	E1, E5a, E5b
	QZSS ³	
	SBAS	WAAS, EGNOS, MSAS, GAGAN, SDCM
Performance Specifications	Cold start	<50 s
	Warm start	<45 s
	Hot start	<15 s
	RTK Initialization time	<10 s
	Signal reacquisition	<1.5 s
	Initialization reliability	>99.9%
	Velocity accuracy	0.03 m/s
	Acceleration	4 g
	Overload	15 g
	Time accuracy	20 ns
	Positioning Specifications	Post Processing
Single Baseline RTK		8 mm + 1 ppm Horizontal 15 mm + 1 ppm Vertical
DGPS		<0.4m RMS
SBAS		1m 3D RMS
Standalone		1.5m 3D RMS
Communications	3 LV-TTL ports, 1 RS-232 baud rates up to 921,600 bps	
	1 USB port	
	1 LAN Ethernet port, HTTP, TCP and Ntrip protocol	
	2 CAN Bus (Reserved)	
	2 Pulse Per Second (PPS) output	
	1 Event Marker input	
	3 LED indicators show the working status	
	External Oscillator input	
Data Format	Correction data I/O	RTCM 2.X, 3.X, CMR(GPS only), CMR+(GPS only)
	Position data output	- ASCII: NMEA-0183 GSV, RMC, HDT, VHD, GGA, GSA, ZDA, VTG, GST; PTNL, PJK; PTNL, AVR; PTNL, GGK - ComNav Binary update to 20Hz - BINEX Data: 0x00, 0x01-01, 0x01-02, 0x01-05, 0x7d-00, 0x7e-00, 0x7f-05 - Position data output rate: 1 Hz, 2 Hz, 5 Hz, 10 Hz, 20 Hz
Physical	Size(L × W × H)	100 mm × 60 mm × 9 mm
	I/O interface	2 × 22 pin male connector
	Weight	45 g
	Antenna connector	1 × MMCX female, 50 Ω
Electrical	Input voltage	+3.3 V ~ +5.5 VDC
	Power consumption	1.7 W
	Memory	8 GB
Environmental	Working temperature	-40 °C to + 80 °C
	Storage temperature	-55° C to + 95 °C
	Humidity	95% no condensation
Software	ComNav Compass Receiver Utility software	
Optional Accessories	AT-series GNSS antenna	
	5 m/10 m RF Cables	
	OEM Board Evaluation Kit	

1. DP-Filter smooth function largely improves the pass to pass accuracy. Please refer to white paper for more information.
2. PVT: Positioning, Velocity and Timing.
3. QZSS is reserved for future upgrade.

Specifications subject to change without notice.