

ER-680 BD high-precision storage type receiver



ER-680 new design support BD, GPS and GLONASS system eight frequency high precision reference station receiver type products, the embedded Linux operating system based on the receiver uses our company has completely independent intellectual property rights system of multi frequency high performance SOC chip a Nebulas™.

It supports the development of secondary; built-in storage can accommodate a month of continuous observation data, the 10000mah smart lithium battery, with friendly human-computer interaction, Bluetooth, WiFi, 3G WCDMA data module. Also it can easily realize PC or PDA access operation to the host ER-680, strong anti-interference ability, high stability, meet the needs of base station unattended operation. It is widely applied in surveying and mapping, meteorology, earthquake, displacement monitoring, scientific research and other high precision positioning applications.

Product features:

- Support GPS L1/L2/L5 and compass B1/B2/B3, GLONASS L1/L2
- The precision of pseudo range and carrier phase observation is 1mm and 10cm.
- 16G onboard memory chip
- Support HTTP, FTP, TCP/IP, NTRIP network communication protocol
- Have WiFi, Bluetooth and 3G wireless communication technology
- LED indicator and dot matrix OLED control interface
- IP67 waterproof and dustproof

Performance Index	
Passageway:	Based on 384 channel Nebulas chip
Signal:	BDS B1/B2/B3+GPS L1/L2/L5+GLONASS L1/L2
Single point positioning(RMS):	Plane: 1.5m, Altitude 3.0mm
Static measurement (RMS) :	Plane: 2.5mm + 1ppm Altitude: 5mm + 1ppm
RTK (RMS) Plane:	1cm + 1ppm
Altitude:	1.5cm + 1ppm
Observation accuracy (RMS) Pseudo range:	10cm
Carrier phase:	1mm
Cold start:	50s
Recapture:	1s
Initialization time:	10s
	(type) Initialization reliability greater than 99.9%
Differential data format	RTCM v2.3x/3.0/3.2 CMR
Location data format	NMEA-0183, UNICORE, BINEX
Data update rate	The highest 20Hz
The built-in storage	16G board Nor flash chip
The precision of time(RMS)	20ns
The speed accuracy(RMS)	0.03m/s
Control interface	WEB, 256*64 OLED 4*LED, 7*
Network protocol	TCP/IP, NTRIP, HTTP, FTP
Communication interface	
Function interface	2*RS-232 serial port (1 DB9, 1 LEMO)
	1*RJ45 Net export 10/100M
	1*1PPS

	1*Mini USB, support OTG
	Wireless WiFi 802.11g, Bluetooth 2.0
	3G (WCD)
	1*SIM card
The built-in battery	12 hours of continuous work
Input voltage	9 ~ 18V DC
Power waste	4.8W (typical)
Power interface	1 LEMO
RF antenna interface	TNC (F) , 50Ω impedance
RF signal level	-80dBm ~ -105dBm
The antenna of LNA power supply	4.75 ~ 5.10V, 0 ~ 100mA
The external clock frequency	10MHz
External clock input	SMA, 50Ω
Clock signal level	0dBm ~ 10dBm
Physical characteristics	
Size	265mm×194mm×77mm
Humidity	95% No condensation
Working temperature:	-40℃ ~ +65℃
Storage temperature :	-40℃ ~ +85℃
Electrical indicators	
Input voltage	9 ~ 18V DC
Can accept RF input levels	-80dBm~-105dBm
LNA feed	4.75~5.10v, 100mA

