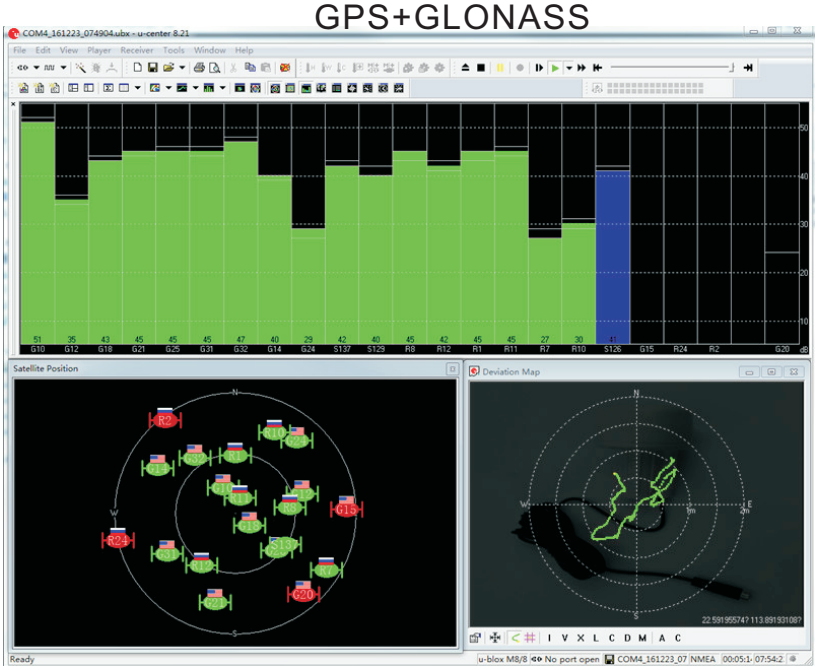
STOTON GNSS Module

TOPGNSS

GN-801 UART GNSS Module Ubx- 8030-kt chipset

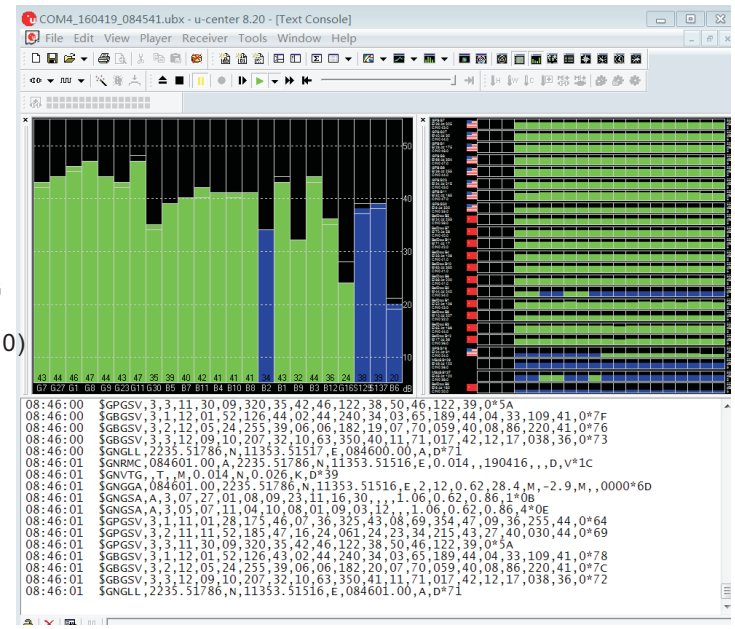
The TTL Multi GNSS Receiver based on u-blox 8chipset has a built-in antenna for high sensitivity. can use this global satellite navigation receiver to connect your device to NMEA data.

GPS+GLONASS



Specification

- u-blox 8 UBX-M8030-KT chipset
- Frequency:
  GPS: L1, 1575.4200 MHz
  GLONASS: L1, 1602 (k x 0,5625) MHz
  BEIDOU COMPASS: B1, 1561.0980 MHz
  GALILEO E1, 1575.4200 MHz
  QZSS L1, 1575.4200 MHz
- Accepts the signals of up to 72 satellites at the same time
- Supports AssistNow online/offline,
  SBAS (WAAS, EGNOS, QZSS and MSAS)
- Supports NMEA 0183 protocols: GGA, GSA, GSV, RMC, VTG
- Default UART output protocol(optional RS232, USB)
- Baud rate: 9600 (can be set 4800.19200.115200.38400.57600)
- Update rate:
  Refresh rate: 1HZ (can be set 1-10HZ)
  single GNSS: 18 Hz (e.g. GPS solo)
  multi GNSS: 10 Hz (e.g. GPS+GLONASS)
- Sensibility max. –167 dBm
- IPX6 protection class
- Magnetic, non-slip on the bottom
- LED-indicator for GPS-status
- Operating temperature: -40 °C ~ 85 °C
- Power supply: 3.3-5.4V
- Current consumption: max. 45 mA
- Cold start in ca. 26 seconds
- Hot start in ca. 1 second
- Positioning accuracy: 2.5 m CEP (Circular Error Probable) and
  2 m CEP with SBAS
- Dimensions (LxWxH): ca. 30 x30*8.2mm



```
08:46:00  $GPGSV,3,3,11,30,09,320,35,42,46,122,38,50,46,122,39,0*5A
08:46:00  $GBGSV,3,1,12,01,52,126,44,02,44,240,34,03,65,189,44,04,33,109,41,0*7F
08:46:00  $GBGSV,3,2,12,05,24,255,39,06,06,182,19,07,70,059,40,08,86,220,41,0*76
08:46:00  $GBGSV,3,3,12,09,10,207,32,10,63,350,40,11,71,017,42,12,17,038,36,0*73
08:46:00  $GNGLL,2235.51786,N,11353.51517,E,084600.00,A,D*71
08:46:01  $GNRMC,084601.00,A,2235.51786,N,11353.51516,E,0.014,,190416,,,D,V*1C
08:46:01  $GNVTG,,T,,M,0.014,N,0.026,K,D*39
08:46:01  $GNGGA,084601.00,2235.51786,N,11353.51516,E,2,12,0.62,28.4,M,-2.9,M,,0000*6D
08:46:01  $GNGSA,A,3,07,27,01,08,09,23,11,16,30,,,,1.06,0.62,0.86,1*0B
08:46:01  $GNGSA,A,3,05,07,11,04,10,08,01,09,03,12,,,1.06,0.62,0.86,4*0E
08:46:01  $GPGSV,3,1,11,01,28,175,46,07,36,325,43,08,69,354,47,09,36,255,44,0*64
08:46:01  $GPGSV,3,2,11,11,52,185,47,16,24,061,24,23,34,215,43,27,40,030,44,0*69
08:46:01  $GPGSV,3,3,11,30,09,320,35,42,46,122,38,50,46,122,39,0*5A
08:46:01  $GBGSV,3,1,12,01,52,126,43,02,44,240,34,03,65,189,44,04,33,109,41,0*78
08:46:01  $GBGSV,3,2,12,05,24,255,39,06,06,182,20,07,70,059,40,08,86,220,41,0*7C
08:46:01  $GBGSV,3,3,12,09,10,207,32,10,63,350,41,11,71,017,42,12,17,038,36,0*72
08:46:01  $GNGLL,2235.51786,N,11353.51516,E,084601.00,A,D*71
```

GPS+BEI DOU

Support GNSS positioning mode to modify the switch: the default GPS + GLONASS, GPS + BEI DOU+Galileo can be set.

If you have any problems in use, please feel free to contact us at any time.
Skype:topgnss E-Mail: sales@stotoncn.com

Usage method :

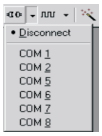
1.Download and install the receiver USB driver on your computer,Download: www.ublox.com

UBX-GNSS-CDC-ACM-windows_Driver_(UBX-drv-v1.2.0.8).exe.zip

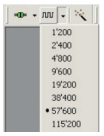
2. u-center_v8.25

3. Connect the receiver device,run U-center software -
select the COM port:- set baud rate (4800-9600-38400-19200-115200-57600)

Select COM port:



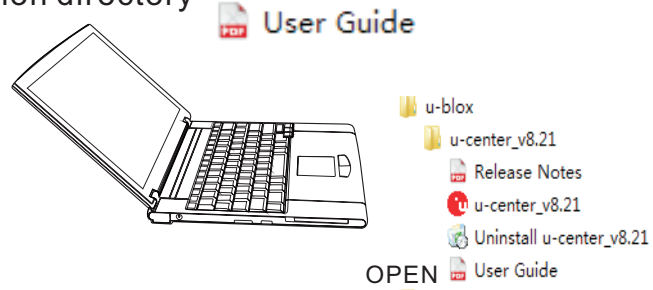
set baud rate

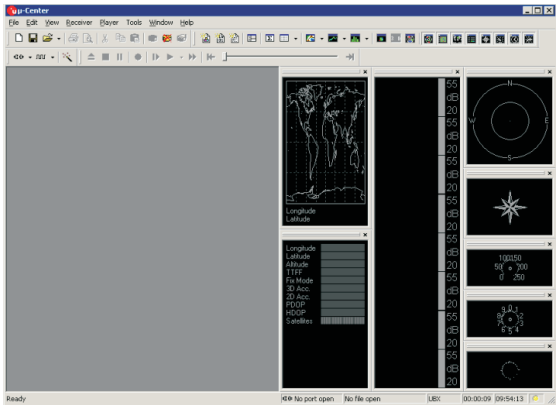


Prompt; GNSS Module satellite signals, need to use in the open sky outside the sky, to avoid the top of the GNSS Module block metal.

u-center user Guide

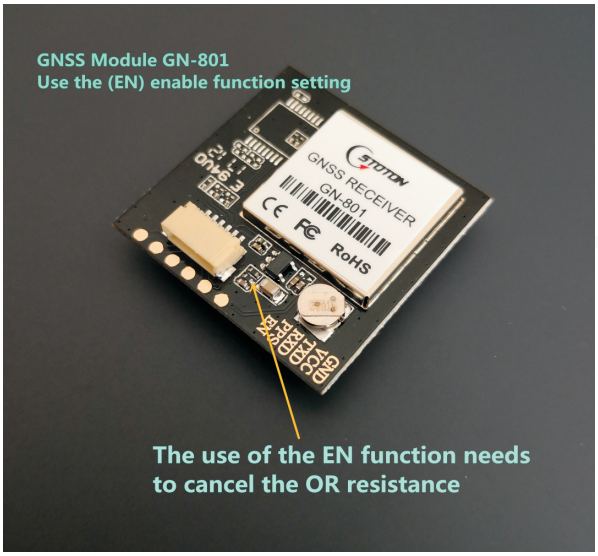
U-center operating instructions:Please open the reference PDF document in the U-Center file installation directory

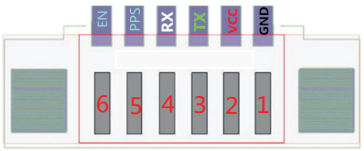




prompt:can through the u-center assessment tool for GPS receiver parameter configuration settings, The user can configure the baud rate of the receiver, refresh the frequency, switch the GNSS mode of operation, and so on. （See U-center User's Guide for details) GN-801 supports maximum 10HZ output refresh rate.

1.0 6Pin connector wiring definition





PIN definition description	
1. GND	Ground
2. VCC	VCC power supply voltage is 3.3V-5.4V
3.TX	UART/TTL communication protocol (optional RS232_TXD)
4.RX	UART/TTL communication protocol (optional RS232_RXD
5.PPS	Time standard pulse output
6.EN	Power supply enable, high frequency / floating module operation, low frequency module off

Online purchase of samples:https://gnssshop.aliexpress.com/store/1920594