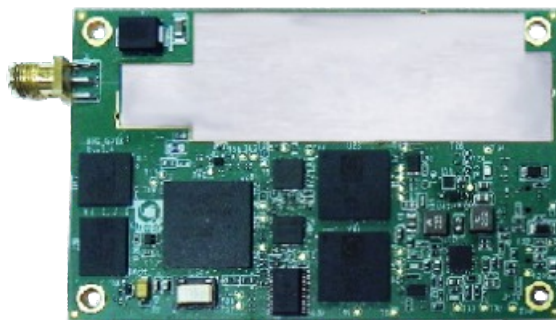


# IRNSS-GPS-GLONASS-GAGAN Receiver



## Features

- ▲ High performance, Fast TTFF IRNSS-GPS-GLONASS-GAGAN Receiver
- ▲ Supports 40 channels (16 GPS, 14 GLONASS, 7 IRNSS, 3 SBAS)
- ▲ Active antenna port for interface to GNSS antenna
- ▲ Antenna open circuit detection, short circuit protection Lightning protection is supported
- ▲ Provides GPS, GLONASS, IRNSS and combined navigation solution
- ▲ Power ON BIST support with software / hardware output
- ▲ Single 5.0 V input supply
- ▲ Antenna supply of 5.0 V (or 3.3V or external supply)
- ▲ Primary UART for message input / output / maintenance
- ▲ Secondary UART for message input / output
- ▲ Supports NMEA-0183 / proprietary message protocol



IRNSS-GPS-GLONASS-GAGAN Receiver

### Few of other products realized by ACCORD



# Specifications of IRNSS GPS GLONASS GAGAN Receiver

## Performance

Channels	40 Channels (IRNSS-L5, GPS-L1, GLONASS-L1, GAGAN)
Cold Start TTFF* (without almanac, time, or position)	50 second (95% of the time), open sky *Combined TTFF
Hot Start TTFF* (with ephemeris, almanac, time and position)	15 second (95% of the time), open sky *Combined TTFF
Combined Position Accuracy (Horizontal)	10 m, 1 $\sigma$ (without SBAS) 6 m, 1 $\sigma$ (with SBAS)
Combined Velocity Accuracy	0.2 m/s, 1 $\sigma$
Update rate	1 second
Dynamics	Velocity: 515 m/s Acceleration: 10g Jerk: 4 m/s <sup>3</sup>
Combined 1PPS	100 ns (RMS) with respect to GPS / UTC under open sky

## Host Communication

Configuration	TX, RX (2 Ports)
Baud Rate	4800, 9600, 19200, 38400, 57600, 115200 bps
Message Formats	8 data bits, no parity, 1 start, 1 stop
Default	115200 bps

## Software Features

Self Test	Built-in Self Test (BIST) with hardware and software output
Upgrade	Software Upgrade support

## Mechanical

Dimensions	85 mm x 55 mm x 10 mm (without Board-to-Board connector)
Weight	30 gms (approximate)
RF connector	SMA female
Interface connector	18-pin dual-row type FLE

## Environmental

Operating Temperature	-40° C to +70° C
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## Electrical

Supply Current (@ 5.0V)	260mA
Antenna Current (@ 5.0 V)	10 mA to 100 mA
Battery backup current (@3.0V)	20 $\mu$ A

## Messages

NMEA 0183	\$GP, \$GL, \$GI, \$GN message strings for GPS, GLONASS, IRNSS and Combined constellation (Version 3.01)
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