A5135-H   Overview   Tech Specs   Downloads   Part Numbers

The A5135-H will track and follow GPS and GLONASS systems concurrently

The A5135-H is a high-sensitivity concurrent GNSS antenna receiver that integrates Qualcomm's SiRFstar V technology into a single, compact and easy to integrate SMT device.

By supporting simultaneous GLONASS, GPS, QZSS and SBAS measurements with the industry's best sensitivity engine, the highest accuracy, ground tracks and fastest time-to-first-fix (TTFF) are ensured even under tough operating conditions.

Product Highlights

- Concurrent GNSS receiver
- Pin-to-pin compatible with A2135-H / A2235-H
- Lowest tracking power consumption
- Download SiRF Live

Key Markets

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PERFORMANCE   HIGHLIGHTS

Channels	52	
Frequency	GPS LI – 1,575 MHz GLONASS – 1,602 MHz	
Sensitivity1	GPS	GLONASS
Tracking	– 165 dBm	– 163 dBm
Navigation	– 160 dBm	– 159 dBm
Acquisition (cold start)	– 147 dBm	
Position Accuracy2) (horizontal)	< 2.5 m CEP (autonomous) < 2.0 m CEP SBAS	
Time To First Fix		
Hot Start2)	< 1 s	
Warm Start2)	< 30 s	
Cold Start2)	< 35 s	
Navigation		
Update Rate	1 Hz / 5 Hz Supported	

SiRFnavTM	High availability and coverage; improved TTFF in weak signal environments
SiRFawareTMTM	
Jammer remover technology	Detects and removes up to 8 in-band jammers with minimal loss of sensitivity
A-GPS	Embedded Extended Ephemeris (SiRFInstantFix) and Ephemeris Push support
MEMS I2C interface	Prepared to use additional sensor information for improved navigation

COMMUNICATION

POWER CONSUMPTION GPS + GLONASS

UART – OSP

Open Socket Protocol	Protocol extension for SiRFstarV
Baud rate Switchable	115.2k (default) 1,200 to 115.2k
Ports	Tx (Binary output) Rx (Binary input)

UART – NMEA (default)

NMEA message Switchable	GGA, RMC, GSA, GSV, VTG, GLL, ZDA
Baud rate Switchable	1,200 to 115.2k Default 9600
Ports	Tx (NMEA output) Rx (NMEA input)

MECHANICAL

Dimensions

L x W x H	17.78 x 16..01 x 2.5 mm
L x W x H	0.7" x 0.65" x 0.1"
Weight	4 g / 0.14 oz.

Supply voltage	3.0 to 3.6 VDC
Average Current Draw	(typical)
Full power mode (Searching) Peak Current	42mA
Full power mode (Searching) Average Current	36mA
Full power mode (Tracking) Average Current	31mA
Trickle Power Mode	29mA
Hibernate Status	27uA

ENVIRONMENT

Temperature

Operating	-40°C to +85°C
Storage	-40°C to +85°C
Humidity	Non condensing