

RTK-4671-SHDR

Single-Frequency, Multi-Constellation

RTK-4671-MHDR

Dual-Frequency, Multi-Constellation



High-Precision GNSS RTK Dead Reckoning Solution for Smart Driving & Lane Level Navigation

LOCOSYS RTK-4671-SHDR/MHDR is a high-precision GNSS RTK solution targeting for the smart driving and lane level navigation markets. The newly designed LOCO II engine architecture is optimized to offer a seamless experience in dense urban canyons. The RTK-4671-SHDR/MHDR takes the shortest time to fix position and continues to work wherever they are.

Centimeter-Level Positioning & Dead Reckoning / Support Rover

RTK-4671-SHDR/MHDR is a cost-efficient GNSS RTK board for cm-level positioning and accurate raw measurements output, which can be integrated with autopilots and inertial navigation units. RTK-4671-SHDR board supports GPS, GLONASS, Beidou, GALILEO, QZSS and SBAS constellations to improve the continuity and reliability of the RTK solution even in harsh environment. It features powerful compatibility with other GNSS boards in the market by flexible interfaces, smart hardware design and popular log/command formats adopts Real Time Kinematics (RTK) technology with the correction data from CORS network. It also supports both rover and base solutions for those which do not have public CORS network, compact solution and the best-in-class low power solution for precise positioning application.

RTK-4671-SHDR is a single-band multi-system with an ARM base processor; RTK-4671-MHDR is a dual-band multi-system with an ARM base processor. RTK-4671-SHDR/MHDR not only supports GPS, GLONASS, Beidou, GALILEO, QZSS and SBAS, but also has a flash memory, TCXO, RTC crystal, LNA and SAW filter, and embedded MEMS sensors (6-axis accelerometers + gyros). The high-precision Positioning/Dead Reckoning receiver offers centimeter-accurate positioning and heading with low-power consumption.

LOCOSYS ADR/UDR software includes features to receive and use data from the built-in sensors along with external signals for wheel speed and Forward/Reverse direction. The vehicle signals are used to provide a high level of accuracy in the navigation solution.





Features

- Support GPS, GLONASS, BeiDou, GALILEO and QZSS L1
- Capable of SBAS (WAAS, EGNOS, MSAS) Precise navigation, positioning
- Great anti-jamming performance (due to multi-tone active interference canceller).
- Built-in LOCOSYS Dead Reckoning (ADR/UDR) both technology software
- Built-in MEMS sensor (3-axis Gyroscope and 3-axis Accelerometer)
- Support MEMS raw data output, High update rate (up to 100Hz)
- Support Odometer (wheel-tick pulse) input
- Support sensors data feed through the UART port
- Support ADR/UDR Automatic fast learning calibration
- Low-power consumption and compact size
- Current limited feature (limited to 50mA typ.) with active GNSS antennas
- Industrial operating temperature range -40 to +85°C
- Easy and simply to integrate
- LOCOSYS IATF 16949 certified production sites

Application

- ⊙ Autonomous Vehicle Guidance
- ⊙ Autonomous Vehicle (ex: AVN/T-BOX/HUD)
- ⊙ Internet of Vehicles
- ⊙ Unmanned Aerial Vehicles
- ⊙ Precision Agriculture
- ⊙ Hand-Held Device
- ⊙ AGV Robotics
- ⊙ V2V / V2X System
- ⊙ Geographical measurement
- ⊙ Geographical survey points
- ⊙ Offshore / Marine Applications
- ⊙ Tracker

Model	RTK-4671-SHDR	RTK-4671-MHDR
Type	Embedded Board	Embedded Board
GNSS Frequency	Single-band	Multi-band
Dead Reckoning	●	●
Base Station/Rover	●	●
Constellations	GPS , GLONASS , Galileo BeiDou , QZSS	GPS , GLONASS , Galileo BeiDou , QZSS
GNSS Position Accuracy	1.5m CEP	1.5m CEP
RTK Accuracy	0.01m + 1ppm CEP	0.01m + 1ppm CEP
ADR Accuracy	0.5%	0.5%
UDR Accuracy	5%	5%
Update Rate	1HZ	1HZ / 4HZ
RTCM Input	●	●
Windows Software	●	●
Operating Temp	-40°C to +85°C	-40°C to +85°C
Dimension	46*71*7.7mm	46*71*7.7mm
Manufactured	IATF 16949	IATF 16949



Version: RV01

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