Quectel LC02H(BC)_RQN

GNSS Module

LC02H(BC)_RQN

Release Notes

GNSS Module Series

Rev. LC02H(BC)_RQN_Firmware_Release_Notes_V0103S

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Our aim is to provide customers with timely and comprehensive service. For any assistance, please contact our company headquarters:

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Contents

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1. Release Content

This document provides the Release Notes for LC02H(BC)_RQN.

The release version is LC02HBCNR01A03S_RQN.

2. Take Note of

SN	Item
[1]	The default satellite constellation configuration is GPS L1 + GLONASS L1 + Galileo E1 + BDS B1I + QZSS L1.
[2]	The default UART baud rate is 115200 bps.
[3]	The validity period of GPS week number is from April 2019 to August 2034.

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3. Release History

3.1. Firmware Release History

Firmware Version	Description
LC02HBCNR01A03S_RQN	Mass production
LC02HBCNR01A02S_RQN	Only for sample
LC02HBCNR01A01S_RQN	Only for sample

3.2. New Features

LC02HBCNR01A03S_RQN	
SN	**Brief Description**
[1]	Added the **$PQTMCFGBLD** command to configure the baseline distance.
[2]	Added the **$PQTMCFGPROT** command to configure the input and output protocol type of the port.
[3]	The **$PQTMSAVEPAR** command added support for saving the parameters configured by the **PAIR** command.
[4]	The **$PAIR513** command added support for saving the parameters configured by the **PQTM** command.
LC02HBCNR01A02S_RQN	
SN	**Brief Description**
[1]	The **$PQTMCFGMSGRATE** command added support for output rate configuration of the **$PQTMANTENNASTATUS** and **$PQTMTAR** messages.
[2]	Added the **$PQTMCFGATTBIAS** command to configure the output angle.

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3.3. Improved Features

LC02HBCNR01A03S_RQN	
SN	**Brief Description**
[1]	Optimized the position and heading accuracy under weak signals.
[2]	Optimized the issue that the pitch and roll angles drift in high or low temperature environment.
[3]	Fixed the issue that the output of heading angle and roll angle is wrong when using **$PQTMCFGATTBIAS** command.
[4]	Disabled automatic baseline length estimation function, and the **$PQTMCFGBLD** command does not support configuring the baseline length to 0.
[5]	Fixed the issue that the **$PQTMCFGNMEADP** command still takes effect when invalid parameters are set.
[6]	Fixed the issue that in the **$PQTMTAR** message, when the **<Quality>** field is 6, the **<UsedSV>** field is not 0.
[7]	Removed the indicators showing 1 and 2 for **<Quality>** field in **$PQTMTAR** message.
[8]	Fixed the issue that the last field of the **$PQTMANTENNASTATUS** message is not the default value when powered on.
[9]	Improved the probability of success for the fixed heading
[10]	Disabled the SBAS function.
LC02HBCNR01A02S_RQN	
SN	**Brief Description**
[1]	Optimized the position and heading accuracy under weak signals.
[2]	Fixed the issue of low probability of abnormal longitude and latitude after positioning.
[3]	Fixed the issue that the CN value of the satellite displayed in the GSV statement is 0 with a low probability under weak signals.
[4]	Reduced time to first fix of heading.

3.4. Errata

SN	Bug Description
/	/

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4. Functions List

Category	Item	Supported Version (Since)	Note
Basic Function	GPS	LC02HBCNR01A01S_RQN	/
	GLONASS	LC02HBCNR01A01S_RQN	/
	Galileo	LC02HBCNR01A01S_RQN	/
	BDS	LC02HBCNR01A01S_RQN	/
	QZSS	LC02HBCNR01A01S_RQN	/
	1PPS	LC02HBCNR01A01S_RQN	/
	AGNSS	LC02HBCNR01A01S_RQN	/
	Low Power	LC02HBCNR01A01S_RQN	/
	Upgrading	LC02HBCNR01A01S_RQN	/
Special Function	Antenna Detection	LC02HBCNR01A01S_RQN	/
	Heading	LC02HBCNR01A01S_RQN	/
Protocol	NMEA 0183	LC02HBCNR01A01S_RQN	/
Interface	UART	LC02HBCNR01A01S_RQN	/

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About Quectel

Quectel Wireless Solutions is the leading global supplier of cellular and GNSS modules, with a broad product portfolio covering the most recent wireless technologies of 5G, LTE/LTE-A, NB-IoT/LTE-M, UMTS/HSPA(+), GSM/GPRS and GNSS. As a professional IoT (Internet of Things) technology developer and cellular module supplier, Quectel is able to provide one-stop services for IoT cellular modules. Quectel products have been widely applied in IoT/M2M fields including smart payment, telematics and transport, smart energy, smart cities, security, wireless gateways, industry, healthcare, agriculture, and environment monitoring.

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