

# **EC25-AUX-GA Release Notes**

## **LTE Standard Module Series**

Rev. EC25-AUX-GA\_Firmware\_Release\_Notes\_V0803\_01.001.01.001

Date: 2020-08-10



## 1. Preamble

This document provides the Release Notes for EC25-AUX-GA firmware version **EC25AUXGAR08A03M1G\_01.001.01.001**. It describes major changes compared to EC25-AUX-GA firmware version **EC25AUXGAR08A02M1G\_01.001.01.001**. For a detailed listing of all changes, refer to the EC25 AT Command Set.

## 2. Matters Needing Attention

SN	Brief Description
----	-------------------

## 3. New Features

Item/Category	Brief Description	Since
NETWORK	Added <b>AT+QICSGPEH</b> .	R08A02_01.0 01.01.001
HTTP	Added AT commands as follows: <b>AT+QHTTTPUT</b> , <b>AT+QHTTTPUTFILE</b> , <b>AT+QHTTTPPOST</b> , <b>AT+QHTTTPPOSTFILE</b> , <b>AT+QHTTTPCFG="CUSTOM_HEADER"</b> .	R08A02_01.0 01.01.001
TCP/UDP	Added <b>AT+QCFG="tcp/windowsize"</b> .	R08A02_01.0 01.01.001
NETWORK	Added <b>AT+QCFG="iprulectl"</b> .	R08A02_01.0 01.01.001
GENERAL	Solved the probabilistic problem of module instability when executing AT command <b>AT+QMIC?</b> .	R08A02_01.0 01.01.001
FTP	Added commands EPSV/EPRT to match IPv6 FTP.	R08A02_01.0 01.01.001
HTTP	Solved the problem of HTTP 400 error when URL is IPv6 IP in IPv6.	R08A02_01.0 01.01.001
GENERAL	Added <b>AT+QCFG="qoos"</b> .	R08A02_01.0 01.01.001
VOICE CALL	Added DSCI report in emergency call.	R08A02_01.0 01.01.001
GENERAL	Added the MBN of TIM operator.	R08A02_01.0 01.01.001
TCP SSL	Added <b>AT+QSSLRCV</b> to read the remaining unread messages.	R08A02_01.0 01.01.001

GENERAL	Added <b>AT+QEGPAPN</b> to output the actual APN of the network and the APN that the user set.	R08A02_01.0 01.01.001
GNSS	Added <b>AT+QGPSCFG="gnssrawdata",&lt;onoff&gt;</b> to control the output of GNSS raw data.	R08A02_01.0 01.01.001
GENERAL	Supported the feature of MBIM.	R08A03_01.0 01.01.001
NETWORK	Added PDP activation request event, that is the reporting of URC +CGEV: PDN ACT1 after executing <b>AT+CGEREP=1,0</b> and attaching LTE network.	R08A03_01.0 01.01.001
GENERAL	Added <b>AT+QCFG="urc_cause_support"</b> to control the reporting of network rejection cause URC.	R08A03_01.0 01.01.001
SIM DETECTION	Supported the feature of invalid SIM card detection.	R08A03_01.0 01.01.001
GENERAL	Added AT+QADCDET to support ADC values periodic detection and report.	R08A03_01.0 01.01.001
NETWORK	Extended the valid value of <op> of <b>AT+QCFG="fast_dormancy"</b> , the new value 3 means SCRI would be sent out at T323+1 second if there was no PS data transmission in the period of T323 timer.	R08A03_01.0 01.01.001
NETWORK	Added <b>AT+QCFG="roamserviceex"</b> to disable network card dialing and voice call in roaming state.	R08A03_01.0 01.01.001
NETWORK	Added <b>AT+QRXPWREX</b> to identify whether the antenna was main antenna if only one antenna signal was searched under weak signal situation.	R08A03_01.0 01.01.001
GENERAL	Added <b>AT+QLOCI</b> to list or clear EF_LOCI files including RPLMN.	R08A03_01.0 01.01.001
GENERAL	Added the QuecThing feature.	R08A03_01.0 01.01.001
TCP/UDP	Added <b>AT+QIKALIVE</b> to control keep-alive.	R08A03_01.0 01.01.001
NETWORK	Supported to lock PLMN without inserting a SIM card.	R08A03_01.0 01.01.001
AUDIO	Added <b>AT+QCFG="frhrcodec"</b> to control the EFR/HR/FR voice coding method of GSM.	R08A03_01.0 01.01.001
GENERAL	Added <b>AT+QCFG="urc/ri/restart"</b> to control whether to re-start RI timer for a new URC.	R08A03_01.0 01.01.001
SIM CARD	Added <b>AT+QCFG="sim/poll_time_delay"</b> to configure uim_ptr->setting.poll_time_delay.	R08A03_01.0 01.01.001
UAC	Supported to paly local music with UAC.	R08A03_01.0 01.01.001
GENERAL	Added Reliance MBN.	R08A03_01.0 01.01.001
UAC	Added the feature of UAC Music.	R08A03_01.0 01.01.001
GENERAL	Added an interface to set MISC partition flag and supported to determin solution to modem error with <b>AT+QCFG="ModemRstLevel"</b> or <b>AT+QCFG="ApRstLevel"</b> .	R08A03_01.0 01.01.001

<b>NETWORK</b>	1. Added <b>AT+QDPTRYCFG</b> to configure PDP activation request times and <b>AT+QDPTRYCHK</b> to check request frequency and report request status via URC.  2. Supported to report URC +CGEV: ME ACT after executing <b>AT+QCRMCall</b> successfully with +CGEV was enabled by <b>AT+CGEREP</b> under 3G/2G network.	R08A03_01.0 01.01.001
<b>GENERAL</b>	Improved <b>AT+QTEST</b> to write files into efs2.	R08A03_01.0 01.01.001
<b>GENERAL</b>	Released GPIO 1018.	R08A03_01.0 01.01.001

## 4. Improved Features

Item/Category	Brief Description	Since
<b>DFOTA</b>	Supported xz compress option in Kernel.	R08A02_01.0 01.01.001
<b>MQTT</b>	Changed to return error when sending 0 bytes data by <b>AT+QMTPUBEX</b> after connecting MQTT server.	R08A02_01.0 01.01.001
<b>GENERAL</b>	Supported <b>AT+QFWDCLIENT</b> .	R08A02_01.0 01.01.001
<b>GENERAL</b>	Solve the problem that the emergency power-off mode did not take effect after setting the <b>AT+QCFG="FAST/POWEROFF",1</b> .	R08A02_01.0 01.01.001
<b>GNSS</b>	Optimized <b>AT+QGPSCFG="autogps",1</b> .	R08A02_01.0 01.01.001
<b>GNSS</b>	Solved the problem that NMEA data could not be outputted.	R08A02_01.0 01.01.001
<b>TCP/UDP</b>	Solved the problem that only one URC for the first data would be reported with sending data multiple times by the server even set <b>AT+QICFG="recvind",1</b> after establishing TCP buffer connection.	R08A02_01.0 01.01.001
<b>FILE</b>	Solved the problem that the current existed file would be listed and returned OK unexpectedly when executing <b>AT+QFLST="SD:*"</b> after unplugging the SD card.	R08A02_01.0 01.01.001
<b>AUDIO</b>	Solved the problem that PCM slave had no sound.	R08A02_01.0 01.01.001
<b>DFOTA</b>	Removed the reporting of POWERED DOWN when rebooting during FOTA.	R08A02_01.0 01.01.001
<b>DFOTA</b>	Supported URC reporting of consecutive upgrade progress after powering off during FOTA upgrade.	R08A02_01.0 01.01.001
<b>GENERAL</b>	Optimized <b>AT+QDIAGPORT</b> .	R08A02_01.0 01.01.001
<b>MQTT</b>	Solved the problem of module instability when MQTT server quickly sent large amount of data.	R08A02_01.0 01.01.001
<b>GENERAL</b>	Optimized <b>AT+QAUDRDGAIN?</b> and <b>AT+QAUDPLAYGAIN?</b> .	R08A02_01.0 01.01.001

<b>TCP SSL</b>	Optimized the SSL session reuse logic.	R08A02_01.0 01.01.001
<b>TCP/UDP</b>	Solved the problem that there was additional 32 bytes reported of DATA_LENGTH when UDP is connected.	R08A02_01.0 01.01.001
<b>UAC</b>	Solved the problem that UAC had no sound.	R08A02_01.0 01.01.001
<b>TCP SSL</b>	Optimized the feature of SSL.	R08A02_01.0 01.01.001
<b>GENERAL</b>	Solved the problem that high temperature deceleration did not take effect.	R08A02_01.0 01.01.001
<b>DFOTA</b>	Optimized FOTA upgrade process.	R08A02_01.0 01.01.001
<b>DFOTA</b>	Added RSA public key in recoveryfs to check the signature of differential packets during FOTA upgrade, it will continue to upgrade if pass, otherwise 502 error will be reported.	R08A02_01.0 01.01.001
<b>NETWORK</b>	Improved the function of Jamming Detection.	R08A02_01.0 01.01.001
<b>GENERAL</b>	Solved the probabilistic problem of USB disconnection after enabling USB auto-sleep.	R08A02_01.0 01.01.001
<b>HTTP</b>	Solved the problem that the obtained URL was the URL of HTTPS unexpectedly while the HTTP URL was entered under IPv6 address.	R08A02_01.0 01.01.001
<b>MQTT</b>	Solved the problem that when reading data via <b>AT+QMTCFG="willex"</b> , there were extra characters at the end of the data.	R08A02_01.0 01.01.001
<b>HTTP</b>	Optimized the feature of HTTP after enabling rspout/auto.	R08A02_01.0 01.01.001
<b>GNSS</b>	Solved the problem that no data was outputted from NMEA port after USB plugging.	R08A02_01.0 01.01.001
<b>GENERAL</b>	Solved the problem that the return value of <b>AT+QCFG=?</b> executed via UART port was incomplete.	R08A02_01.0 01.01.001
<b>GENERAL</b>	Extended the supported size of AT command to 2K.	R08A02_01.0 01.01.001
<b>GENERAL</b>	Updated CEFS version to EC25AUXGA_V00010_202001061.	R08A02_01.0 01.01.001
<b>GENERAL</b>	Improved the stability of the connection between the module client and Qserver.	R08A02_01.0 01.01.001
<b>AUDIO</b>	Solved the problem that the codec would be re-initialized after executing AT commands related to Audio.	R08A02_01.0 01.01.001
<b>GENERAL</b>	Solved the problem that no data but OK was returned after executing <b>AT+QEEC?</b> .	R08A02_01.0 01.01.001
<b>AUDIO</b>	Optimized <b>AT+QPSND=0</b> .	R08A02_01.0 01.01.001
<b>NETWORK</b>	Remained the previous configuration after configuring LTE with <b>AT+QCFG="band",0,0,0</b> .	R08A02_01.0 01.01.001

NETWORK	Improved the Jamming Detection feature.	R08A03_01.0 01.01.001
NETWORK	Optimized the EDRX feature and disabled it by default.	R08A03_01.0 01.01.001
GNSS	Corrected the valid value of the parameter <DPO_enable> of <b>AT+QGPSCFG="dpoenable"</b> to (0-2).	R08A03_01.0 01.01.001
QuecLocator 2.0	Solved the problem that wrong error code was reported after reaching the timeout configured by <b>AT+QLBSCFG="timeout"</b> when positioning.	R08A03_01.0 01.01.001
QuecLocator 2.0	Changed the returned vlaue format of token after executing <b>AT+QLBSCFG?</b> , <b>AT+QLBSCFG=?</b> and <b>AT+QLBSCFG="token"</b> .	R08A03_01.0 01.01.001
NETWORK	Optimized <b>AT+QRRCCONSTATE</b> to solve the following problems: 1. An illegal value was configured successfully. 2. <b>AT+QRRCCONSTATE=0</b> could not take effect.	R08A03_01.0 01.01.001
TCP SSL	Ignored the verification of multi-level certificate chain by default in embedded SSL protocol.	R08A03_01.0 01.01.001
SMS	Solved the problem that the SMS center address did not changed to the corresponding operators after switching SIM card when the SIM card hot-plug was enabled.	R08A03_01.0 01.01.001
MQTT	Solved the problem that the extra characteristics of willtopic would be outputted at the end of the data string when executing command <b>AT+QMTCFG="willex"</b> to read 256 bytes data.	R08A03_01.0 01.01.001
NETWORK	Solved the problem that <b>AT+QCFG="DISRPLMN"</b> only could close RPLMNACT but could not close RPLMN.	R08A03_01.0 01.01.001
GENERAL	Solve the problem that client could not connect to network after executing <b>AT+QWWAN=1</b> .	R08A03_01.0 01.01.001
GENERAL	Modified the "uar1" of the return value +QFWD CFG: "urc",<socketID>,"uar1","usbat","usbmodem") after executing <b>AT+QFWD CFG=?</b> to "uart1".	R08A03_01.0 01.01.001
NETWORK	Solved the problem that Telecom LTE ONLY IoT card could not register on network and supported the configurations taken effect immediately.	R08A03_01.0 01.01.001
GNSS	Solved the problem that the 7bit_alphabet data could not be printed correctly.	R08A03_01.0 01.01.001
QuecLocator 2.0	Modified the first APN of China Mobile to cmnet.	R08A03_01.0 01.01.001
AUDIO	Supported to record or play the audio file in AMR format.	R08A03_01.0 01.01.001
GENERAL	Solved the problem that no value returned when querying the parameter that was greater than 512 bytes with <b>AT+QEEC?</b> .	R08A03_01.0 01.01.001
GENERAL	Changed usage to 01 (data sentric) in Reliance MBN.	R08A03_01.0 01.01.001
HTTP	Optimized the <b>AT+QFWDHTTP</b> to extend the maximum length of the URL to 1024 bytes and support timeout configuring and returning HTTP response codes after timeout.	R08A03_01.0 01.01.001
MMS	Optimized <b>AT+QMMSCFG="proxy"</b> to support the MMS agent address starting with "0".	R08A03_01.0 01.01.001
DTMF	Added a parameter for <b>AT+QWDTMF</b> to configure the stop playing interval.	R08A03_01.0 01.01.001



GENERAL	Solved the problem that the URC of AP could not be output from the specified port.	R08A03_01.0 01.01.001
LowPower	Solved the problem that <b>AT+QCFG="wakeupin/level",1,1</b> could not take effect.	R08A03_01.0 01.01.001
DTMF	Modified the valid value range of both <duration> and <pause> of <b>AT+QWDTMF</b> to 55-1000.	R08A03_01.0 01.01.001
GENERAL	Solved the problem that an error would occurred when executing <b>AT+QCFG="qcautoconnect"</b> to query configuration.	R08A03_01.0 01.01.001
DTMF	Solved the problem that illegal letters would be saved successfully instead of error reporting when configuring parameters with <b>AT+QTONEDET</b> .	R08A03_01.0 01.01.001
ECM	Solved the problem that the ECM device could not obtain the IP address when the device was started for the first time.	R08A03_01.0 01.01.001
GENERAL	Optimized the USB suspend and resume logic.	R08A03_01.0 01.01.001
GNSS	Solved the problem of incorrect data output via NMEA port.	R08A03_01.0 01.01.001
DFOTA	Solved the problem that 502 and 520 error would be occurred unexpectedly caused by poweroff and rebooting when FOTA upgrades to 90%-100%.	R08A03_01.0 01.01.001
GENERAL	Solved the problem of unexpectedly ESM reporting after disabling rejection code reporting or configuring no ESM reporting with <b>AT+QCFG="urc_cause_support"</b> .	R08A03_01.0 01.01.001
GENERAL	Updated cefs to version 202005191.	R08A03_01.0 01.01.001
AUDIO	Optimized the dialing process during call waiting.	R08A03_01.0 01.01.001
AUDIO	Solved the problem that <b>AT+QCFG="pcmclk",1</b> could not take effect.	R08A03_01.0 01.01.001
GENERAL	Updated Telstra MBN version to 202007141.	R08A03_01.0 01.01.001
CMUX	Solved the problem that executing <b>AT+QURCCFG="URCPORT","all"</b> in CMUX mode to set the CMUX port and USB port as URC output ports did not take effect.	R08A03_01.0 01.01.001
SMS	Solved the problem that the default value of ME and MT stroage space queried by <b>AT+CPMS="ME","SM","MT"</b> was 23 instead of 255.	R08A03_01.0 01.01.001
NETWORK	Solved the problem that the China Telecom B5, 2452 frequency point could not be registered.	R08A03_01.0 01.01.001

## 5. Known Issues

Item/Category	Brief Description
---------------	-------------------

## 6. Functions

### Basic Function

SMS	Voice Call	Data Call	USSD	PHB	CMUX	FILE <sup>1)</sup>	Fax	STK
Y	Y	N	N	Y	Y	Y	N	N

### Protocol Function

QMI	TCP/UDP	PPP	FTP	HTTP	NITZ	NTP	TCP SSL	MQTT
Y	Y	Y	Y	Y	Y	Y	Y	Y
MMS <sup>2)</sup>	SMTP	PING	SMTPS	HTTPS				
Y	Y	Y	Y	Y				

### Special Function

SIM Detection	DFOTA	ECM	Low Power	RMNET	DTMF <sup>3)</sup>	Dual UART	RNDIS	Quec Locator 2.0 <sup>4)</sup>
Y	Y	Y	Y	Y	Y	Y	Y	Y
UAC	SD							
Y	Y							

### NOTES

- Y means the firmware supports this function.
- N means the firmware does not support this function.
- <sup>1)</sup> Supports RAM/SD FILE only.
- <sup>2)</sup> Supports MMS sending only.
- <sup>3)</sup> Supports DTMF decoding only.
- <sup>4)</sup> Quec Locator 2.0 is an efficient location technology developed by Quectel. While it's not free, you need pay for it if you would like to use it.
- Verification Environment is shown below. For more details, please contact Quectel technical support.  
For Windows,  
USB Driver: Quectel\_LTE&5G\_Windows\_USB\_Driver\_V2.1~V2.2  
Qflash Tool: QFlash\_V4.18~V4.19

For Linux,



QMI\_WWAN Driver: Quectel\_Linux&Android\_QMI\_WWAN\_Driver\_V1.2.0.14

GobiNet Driver: Quectel\_Linux&Android\_GobiNet\_Driver\_V1.6.2.9

Qflash Tool: LTE&LTE-A\_QFlash\_Linux&Android\_V2.0

USB Driver: Quectel\_LTE&5G\_Linux\_USB\_Driver\_V1.0

Quectel  
Confidential