



AirPrime HL6528RDx

Firmware 2.4.3 Customer Release Note



SIERRA
WIRELESS®

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Important Notice

Due to the nature of wireless communications, transmission and reception of data can never be guaranteed. Data may be delayed, corrupted (i.e., have errors) or be totally lost. Although significant delays or losses of data are rare when wireless devices such as the Sierra Wireless modem are used in a normal manner with a well-constructed network, the Sierra Wireless modem should not be used in situations where failure to transmit or receive data could result in damage of any kind to the user or any other party, including but not limited to personal injury, death, or loss of property. Sierra Wireless accepts no responsibility for damages of any kind resulting from delays or errors in data transmitted or received using the Sierra Wireless modem, or for failure of the Sierra Wireless modem to transmit or receive such data.

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1. Introduction

1.1. Document Scope

This document is the Firmware 2.4.3 customer release note of the AirPrime HL6528RDx. Firmware 2.4.3 is a maintenance release based on Firmware 2.3.10.

The HL6528RDx is comprised of the following variants:

- HL6528RD
- HL6528RD-G
- HL6528RD-2.8V
- HL6528RD-G2.8V

1.2. New Features/Enhancements

Table 1. New Features in Firmware 2.4.3

Feature	Description
SMART CONNECT	Allow smart network connection mechanism to avoid network congestion with many equipment's starting up in same time.
Secure socket of AT command	Enhanced security with now possibility to use secure socket using TLS 1.2 (Alpha).
CSD Ring indication	Even if CSD call is not supported, module is able to receive a CSD call and notify it through the Ring indicator.
AT+ICF command	New AT command +ICF support.
AT+KRIC command	Adding new pulse duration for Ring indicator.



2. Abbreviations and Definitions

Table 2. Abbreviations and Definitions

Abbreviation/Acronym	Definitions
ADC	Analog Digital Converter
DV2.1	Development verification build #2.1
GPIO	General Purpose Input Output
GPS	Global Positioning System
GNSS	Global Navigation Satellite System
HTTPS	Hypertext Transfer Protocol Secure
NVM	Non-Volatile Memory
PCM	Pulse Code Modulation
PWM	Pulse Width Modulation
SBAS	Satellite Based Augmentation System
SIM	Subscriber Identity Module
SSL	Secure Socket Layer
SUPL	Secure User Plane Location
UART	Universal Asynchronous Receiver Transmitter
USB	Universal Serial Bus



3. Related Documentation

- [1] AirPrime HL6528RDx Product Technical Specification
Reference: 4117701
- [2] AirPrime HL6528RDx AT Commands Interface Guide
Reference: 4117743

>> 4. Compatibility

Table 3. Hardware Compatibility

Hardware Compatibility List
HL6528RDx DV2.1 or newer

Table 4. Software Compatibility

Component	Version
Firmware	1.5.0 or newer

Warning: *Firmware upgrade from earlier versions would result in the module being blocked.*



5. Software Release Description

5.1. Release Identification

Table 5. Firmware Release Information

Identification	RHL6528RD.2.4.3.11CV10F49.201709160006.m6261a_1
Date of generation	2017/09/16
IMEI SV	07
Stack version	MAUI_11C_W14_18_SP_V10_F49

5.2. Software Tools Versions

Table 6. Software Tools

Software Tools Name	Version
USB driver	1.1032.1

5.3. Release Files and Download Processes

Table 7. Release Files

Download Option	File
All in one download executable	RHL6528RD.2.4.3.11CV10F49.201709160006.m6261a_1.exe



6. Software Changes Description

6.1. Validated Corrections and Improvements

Table 8. Changes in Firmware 2.4.3

ID	Description	Impacted Functionality/ Sub-Functionality
MT6261A-1203	Continuous tone during voice call may be eliminated in few seconds.	AT/AUDIO
MT6261A-1282	Escape sequence (+++) may fail to switch AirPrime from online data mode to command mode.	AT/Data
MT6261A-1250	When AirPrime is used in GPRS only mode with Sierra SIM, IMSI and PLMN may change unexpectedly after reset.	AT/GPRS
MT6261A-1253	Selecting a PLMN which is in the forbidden PLMN list in SIM returns OK instead of ERROR.	AT/GSM
MT6261A-1207	Occasionally AirPrime may output incorrect jamming indication.	AT/JAMMING
MT6261A-1230	+KTCPSTART response may be incorrect, if AirPrime is in the numeric TA response mode.	AT/Other
MT6261A-1235	On reception of an SMS, AirPrime does not send NULL character (specific escape in-band character) if PPP session is active on UART/USB and CNMI mode is set to 3.	AT/SMS
MT6261A-1225	In rare cases, AirPrime may not respond after a reset is made with CMUX active ports.	CMUX/CMUX
MT6261A-1190	NMEA sentences \$GPRMC, \$GPGGA are not available until a 3D fix has been obtained.	GPS/GPS

6.2. Interface Changes

Table 9. Interface Changes

Command	Comment
+ICF	New command for Character Framing
+KHTTPCFG	Support HTTP 1.0/1.1 over TLS, and new parameter <ciper_index>
+KRIC	Support pulse duration of RI, and new parameter <pulse duration>
+KSIMSEL	Support SIM selection
+KSSLCFG	New command for SSL configuration
+KSSLCRYPTO	New command for Cipher suite configuration
+KTCPCFG	Support secure mode, and new parameter <ciper_index>
+PHYR	New command for SMART CONNECT
+VIP	Support PCM basic interface



7. Restrictions and Known Issues

The AVMS FOTA package installation time from the previous firmware, **RHL6528RD.2.3.10.11CV10F48.201703231843.m6261a_1**, to this firmware, **RHL6528RD.2.4.3.11CV10F49.201709160006.m6261a_1**, may take up to 8 minutes (from +WDSI: 14 to +WDSI: 16 event indication).

The following table lists out important known issues for Firmware 2.4.3.

Table 10. Restrictions and Known Issues

Issue ID	Description	Impacted Functionality/ Sub-Functionality
MT6261A-1315	AirPrime with specific SIM may fail in dial-up connection.	AT/Data

8. Troubleshooting

Please contact Sierra Wireless customer service for support and debugging information.

9. Certification

This firmware has obtained GCF/PTCRB type approval.