



# AirPrime HL7690

## Firmware 2.27 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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*Note: Some airlines may permit the use of cellular phones while the aircraft is on the ground and the door is open. Sierra Wireless modems may be used at this time.*

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# Document History

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# 1. Introduction

## 1.1. Document Scope

This document is the Firmware 2.27 customer release note of the AirPrime HL7690. Firmware 2.27 is a maintenance release based on Firmware 2.18.

## 1.2. New Features/Enhancements

Table 1. New Features/Enhancements

Feature	Description
Fast shutdown	AT-cmd to trigger Emergency Shutdown



## 2. Abbreviations and Definitions

Table 2. Abbreviations and Definitions

Abbreviation/Acronym	Definitions
ADC	Analog Digital Converter
GPIO	General Purpose Input Output
PCM	Pulse Code Modulation
PWM	Pulse Width Modulation
SIM	Subscriber Identity Module
UART	Universal Asynchronous Receiver Transmitter
UICC	Universal Integrated Circuit Card
USB	Universal Serial Bus



## 3. Related Documentation

- [1] AirPrime HL7690 Product Technical Specification  
Reference number: 4118552
- [2] AirPrime HL76xx AT Commands Interface Guide  
Reference number: 4118395

## 4. Compatibility

Firmware 2.27 is compatible with the AirPrime HL7690 embedded module.



## 5. Software Release Description

### 5.1. Release Identification

Table 3. Firmware Release Information

<b>Identification (ATI3)</b>	RHL769x.2.27.183100.201809071813.x7120m_3
<b>Full Firmware Identification (ATI10)</b>	Modem-Firmware: RHL769x.2.27.183100.201809071813.x7120m_3 Primary-Boot: RHL769x.2.27.0202170316.201809071813.x7120m_3 Secondary-Boot: RHL769x.2.27.0202170316.201809071813.x7120m_3 Update-Agent: RHL769x.2.27.0300170317.201809071813.x7120m_3 4G-Firmware: 7160.S3.561.41.4.832.02.42004.18265 3G-Firmware: 202.999.643.42-54.35
<b>ALL-IN-ONE Firmware FLS image</b>	Filename: HL769x.2.27.183100.201809071813.x7120m_3.fl5 File size in bytes: 20715335 Checksum (CRC32): 0x5E5AAB5C Checksum (MD5): 4F7F57197754325F50ACC3E65EF021C3
<b>ALL-IN-ONE Firmware image, Windows one-click downloader</b>	Filename: HL769x.2.27.183100.201809071813.x7120m_3.exe File size in bytes: 8859133 Checksum (CRC32): 0xFF88ECC6 Checksum (MD5): 7CBBFE3C5662E3B3B2E15631DEBCDB7A
<b>Date of generation</b>	Sep 07 2018 18:13 GMT+8
<b>IMEI SV</b>	HL7690: 7
<b>Stack version</b>	M2M_7120M_HL7690_01.1831.00

### 5.2. Software Tools Versions

Table 4. Software Tools Versions

<b>Software Tools Name</b>	<b>Version</b>
FlashTool	v.4.140.3.66      DLL: v.4.140,0.0
Command Line FlashTool (DownloadTool.exe, dll)	v.1.37      DLL: v.4.140,0.0
USB Host Driver version	WMC_comneon8_v4.32.0 WMC_imc1_v4.44.0_cust

## 5.3. Released Files

Table 5. Released Files

Download Option	Files
All in one download executable	HL769x.2.27.183100.201809071813.x7120m_3.exe
All in one FLS file	HL769x.2.27.183100.201809071813.x7120m_3.flx
All in one DWL file	HL769x.2.27.183100.201809071813.x7120m_3.dwl

## >> 6. Software Changes

### 6.1. Validated Corrections/Improvements

This section lists all corrections or improvements integrated in Firmware 2.27 from Firmware 2.18.

Table 6. Validated Corrections and Improvements

ID	Description	Impacted Functionality / Sub-Functionality
INT7120M-908	+CGCLASS value could change to "CC" when PS detach is done by +KAAT=0. This could result in error when trying to trigger PS Attach using +KAAT=1.	AT/GPRS
INT7120M-125	When "Transfer-Encoding: chunked" is used (configured by AT+KHTTPHEADER) and user does not terminate the uplink transfer with EOF pattern, EOF pattern will be missed in the HTTPPOST server response	AT/IP
INT7120M-92	Device incorrectly sends EOF pattern after the +KFTPSND data session	AT/IP
INT7120M-93	+KTCP_DATA indications are displayed on the terminal in case of direct flow connection with AT+KTCPSTART command	AT/IP
INT7120M-122	After a +KUDPSND data session is suspended with "+++" or DTR1, followed by a +KUDPRCV data session, ATO<session_id> will fail to resume the last +KUDPSND data session	AT/IP
INT7120M-131	After a +KTCPSPND data session is suspended with "+++" or DTR1, followed by a +KTCPRCV data session, ATO<session_id> will fail to resume the last +KTCPSPND data session	AT/IP
INT7120M-332	AT+KCERTSTORE does not allow 3000 characters length	AT/IP
INT7120M-850	+KHTTPSCFG returns value 4 for the <sec_level> parameter when it is set to 3	AT/IP
INT7120M-889	+KTCP_NOTIF indications do not make use of SSL error codes	AT/IP
INT7120M-998	"NO CARRIER" may not be received on the module when a PPP connection termination happens on a CMUX port.	AT/Other
INT7120M-994	With the module is acting as TCP server, very rarely it may not be able to handle the client requests.	AT/Other
INT7120M-929	A listening TCP server on the module may not accept incoming connection requests after an AVMS connection is activated.	AT/Other
INT7120M-933	MCC & MNC could be incorrectly shown in +KCELL command.	AT/Other
INT7120M-159	+CPBR read command for phonebook entry of empty <number> could have incorrect <type> = 0 instead of 129 or 145.	AT/Other
INT7120M-899	AT+CSCA write command does not report the appropriate extended error code when no parameter is input	AT/SMS

ID	Description	Impacted Functionality / Sub-Functionality
INT7120M-939	With an opened unbound UDP socket (i.e. an UDP socket without valid DNS information), the module may return an unsolicited response +KUDP_NOTIF: 2.8 if it sends data terminated with ETX to the connected peer. In addition, if the module reads data from the connected peer, it can return +CME ERROR: 923.	AT/UDP
INT7120M-914	AT+CMUX write command reports an error when the value of <T3> or <K> parameters is not null	CMUX/Other
INT7120M-910	Device resets when PPP connection over UART is used with a baud rate higher than 115200bps due to an excessive number of RTS interrupts	DEVICE/Other
INT7120M-895	AT+CGDCONT cannot define a PDP context with empty APN	GPRS/Other
INT7120M-960	The module may not register to the last PLMN followed by a restart.	GPRS/Other
INT7120M-945	+CGCLASS value could be changed to "CC" when PS detach has been done by +CGATT=0. This could result in error when trying to trigger PS attach using +CGATT=1.	GPRS/Other
INT7120M-940	The module may not return OK response of +KTCPSND command if it has been inappropriately switched to the online command mode from the data mode and triggered the connected server to close the connection.	GPRS/Other
INT7120M-904	When reading the system clock with the AT+CCLK? command, the time zone is updated by NITZ even when +CTZU is disabled	GSM/Other
INT7120M-391	T3412 timer status may show in off state when the UE RRC state changes from "Connected" to "Idle".	LTE/Other
INT7120M-1026	The module may not show the CONNECT indication when entering the data mode by command AT+KTCPSTART.	OTHER/Other
INT7120M-884	SIM detach occurs when AT+CSIM fails to execute a READ RECORD command	SIM/Other
INT7120M-886	AT+CSIM write command response duplicates the command line when the device is registered to a 4G network	SIM/Other
INT7120M-969	When the module is working as TCP server to send data and it closes TCP connection immediately without waiting for ACK of complete data sent, it may not receive the data correctly in next connection in very rare cases.	TCP
INT7120M-952	The module restart can happen in rare cases while performing data transfer on UART 4 wire.	UART/Driver
INT7120M-831	The module may restart in FTP through the Internet connection with NCM in Linux environment.	USB/Other

## 6.2. Interface Changes

Table 7. Interface Changes

Command	Comment
AT+WESHDOWN	Enable/Disable emergency shutdown feature by GPIO
AT+CEER	Added LTE reject error code in AT+CEER



## 7. Restrictions and Additional Information

This section lists additional information or restrictions that must be considered.

Table 8. Restrictions and Additional Information

<b>ID</b>	<b>Description</b>	<b>Impacted Functionality / Sub-Functionality</b>
INT7120M-1025	On the module, +CSQ command might return incorrect LTE RSSI in some scenarios.	AT/Other
INT7120M-997	Sometimes PPP Connection may not be established on the module and may throw IPCP REJ.	OTHER/Other

## 8. Troubleshooting

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

## 9. Certification Description

The following table summarizes the certifications passed for this release.

Table 9. Certification Description

Product	GCF
AirPrime HL7690	3.64.0