



Firmware L10a00 Customer Release Note

AirPrime WISMO228

June 11, 2010

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.

Safety and Hazards

Do not operate the Sierra Wireless modem in areas where blasting is in progress, where explosive atmospheres may be present, near medical equipment, near life support equipment, or any equipment which may be susceptible to any form of radio interference. In such areas, the Sierra Wireless modem **MUST BE POWERED OFF**. The Sierra Wireless modem can transmit signals that could interfere with this equipment. Do not operate the Sierra Wireless modem in any aircraft, whether the aircraft is on the ground or in flight. In aircraft, the Sierra Wireless modem **MUST BE POWERED OFF**. When operating, the Sierra Wireless modem can transmit signals that could interfere with various onboard systems.

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.

The driver or operator of any vehicle should not operate the Sierra Wireless modem while in control of a vehicle. Doing so will detract from the driver or operator's control and operation of that vehicle. In some states and provinces, operating such communications devices while in control of a vehicle is an offence.

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Consult our website for up-to-date product descriptions, documentation, application notes, firmware upgrades, troubleshooting tips, and press releases:

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Document History

Version	Date	Updates
001	November 30, 2009	Creation
002	June 10, 2010	GCF-CC and PTCRB version update
003	June 11, 2010	Validated Corrections / Improvements section update

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>> 1. Introduction

Scope of this Document

The scope of this document is the firmware **L10a00** release description for Air Prime WISMO228. Firmware **L10a00** is a maintenance firmware, based on the firmware **L10_**.

Audience of this Document

This release note may be distributed to all direct and indirect customers and will be posted on the corporate web site under the Support/Private area.

Release Feature List

For more details on these features please refer to section 7 Feature Description.

Main Features Reminder

Features List
GSM/GPRS class 10 capable wireless standard modem
850/900/1800/1900 MHz quad-band
AT commands interface on UART port
Debug interface on SPI bus
User configurable GPIOs
Audio features
AT&T features
TCP/IP AT commands

New Features/Evolutions

Features List

>> 2. Related Documents

- [1] WISMO228 AT Commands Manual
WA_DEV_W228_UGD_004
- [2] WISMO228 TCP/IP AT Commands Manual
WA_DEV_W228_UGD_002
- [3] WISMO228 - Product Technical Specification and Customer Design Guideline
WA_DEV_W228_PTS_002
- [4] Adwl-Light Downloader User Guide
WA_DEV_WISMO_UGD_005

>> 3. Abbreviations and Definitions

Abbreviation/Acronym	Description
AT	Attention
CSD	Circuit Switched Data
DCE	Data Circuit Equipment
DTE	Data Terminal Equipment
GPIO	Global Purpose Input Output
GPRS	Global Packet Radio Service
HLR	Home Location Register
ME	Mobile Equipment
MS	Mobile Station
PDP	Packet Data Protocol
PIN	Personal Identification Number
PLMN	Public Land Mobile Networks
SIM	Subscriber Information Module
TE	Terminal Equipment
UART	Universal Asynchronous Receiver Transmitter

>> 4. Hardware Compatibility

Sierra Wireless Standard Modem Compatibility

Firmware Version	Sierra Wireless Standard Modem Compatibility List
L10a00	Airprime WISMO228

>> 5. Software Release Description

Release Identification

Sierra Wireless Standard Modem – Airprime WISMO228	
Date of Generation	November 30, 2009
Software Identification	L10a00gg.WISMO228 32/16Mbits
IMEISV	012345678901237 02
Checksum	0x8B56AA3D
Binary Size	2638212
Flash Type	32/16 Mbits

Released Files and Download Processes

As this Firmware includes the Security System, which locks the embedded software to the hardware of the Airprime WISMO228, the download must be done by Sierra Wireless only.

For any reason, the same firmware L10a00 should be downloaded on the Airprime WISMO228, the download procedure is shown in document [4] Adwl-Light Downloader User Guide.

Software Tools Version

This section gives the last tools versions to be used with Airprime WISMO228.

Software Tools Name	Version
Adwl-Light Downloader	5.3.3.3a
SpyTracerV2	2.7.2

>> 6. Software Description

The *Severity* values have the following meaning:

- 1 : Critical
- 2 : Major
- 3 : Minor
- 4 : Improvement

Validated Corrections / Improvements

This section gives the list of all corrections or improvements integrated in the firmware L10a00.

ID	Description (What/When)	Customer Impact	Severity*
ANO55453	Unable to transfer text file through TCP/IP	Abnormal behavior	2
ANO55631	[TCP_IP] UDP session: Unable to send out text (ASCII) file (100kbytes)	Abnormal function	2
ANO55649	[TCP_IP] UDP session: WISMO228 is unable to receive any data under unmapped mode.	Incorrect response	2
ANO56050	[TCP/IP] +WIPPING made module hang in some scenario	Module hanged	2
CUS56153	+CUSD response returns HEX instead of ASCII on Vodacom Network	Incorrect character display	1
ANO56222	Change +WIPPING's <repeat>,<interval>,<timeout>,<nwrite>,<ttl> to optional parameter	Incorrect syntax	2
ANO56244	Bearer] Local IP address do not reset to 0.0.0.0 after stop bearer.	Incorrect response	3
ANO56349	COPN: Module reset when AT+COPN is entered	Module reset	1
ANO56393	[TCP/IP][REG] WISMO blocked after create client socket with incorrect port of server.	Abnormal behavior	2
ANO56397	[TCP] +WIPPEERCLOSE response missing after client close socket AT+WIPCLOSE	Incomplete response	3
ANO56409	[TCP/IP] Unexpected escape found after sending <ETX> out, happen after re-enter in CONNECT mode	Abnormal functionality	2
ANO56451	PMR/PEMR issue	Incorrect response	3

Integrated but Not Validated Corrections / Improvements

ID	Description (What/When)	Customer Impact	Severity*
ANO55385	Unexpected unsolicited response and incorrect CME ERROR code when connect bearer with invalid APN	Incorrect response	3
ANO56370	[IOT] Enhanced measurement report (EMR) issue during AMR testing	Incorrect response	1
ANO56377	For incoming call, The voice channel transmitted from a land line phone is established before ATA	Abnormal response	1
ANO56452	After AT+CFUN=1,1 Hardware power-off does not work	Incorrect response	1
ANO56536	Audio quality is bad after HandOver from AMR-HR to HR	Bad audio quality	3
ANO56552	In+CUSD response, <dcs> is shown as <00><FF> in hex with Smartone SIM card, when AT+CSCS="GSM"	Incomplete response	3

Known Problems

ID	Description (What / When)	Severity*
ANO54852	Sidetone cannot be heard without AT+VGR	2
ANO55179	ATV, extra \r\n for header of information responses, and extra "\n" after final result code of "0\r"	2
ANO55437	CMUX, when using Wavecom CMUX software tool and flow control is set to none, the module hangs when module is in sleep mode	2
ANO55516	CFUN: CREG value is not correct after the module is powered on	2
ANO55574	CPBR: Return +CME ERROR: 22 when read the empty record	2
ANO55825	+CGREG indication is not updated in NMO1 cell for the 1st time GPRS attach after reset	2
ANO55874	PSMBNB: Cannot set mailbox number for each lineID	2
ANO56039	PSSTK: Response is blocked when use invalid item Identifier in "MENU SELECTION"	2

ID	Description (What / When)	Severity*
CUS56204	[Echo] Audio level almost totally lowered when AEC is enabled with AT+WMECHO=1,0	1
ANO56330	PSSTKI: Module is hanged when enter invalid <mode> values	1
ANO56405	Default side tone gain cannot be set	2
ANO56595	Hardware flow control not working	1
ANO56599	[UDP] When UDP socket is created without peer IP and port, data mode escape happens when large amount of data is received	2
ANO56614	[TCP][UDP] Change handling of UDP datagram with size larger than max datagram size	2
ANO56617	[TCP][Reg] Data following <DLE> cannot be sent out in continuous mode	2
ANO56734	AT+IFC, Hardware Flow Control setting returns error	1
ANO56735	AT&R, command returns error	1

Other Interface Changes

Some other changes have been performed on the following commands. Please refer to document [1] WISMO228 AT Commands Manual for more information.

New AT Commands

This part lists the commands that have been added in the firmware L10a00. For more information, refer to the command description in document [1] WISMO228 AT Commands Manual and [2] WISMO228 TCP/IP AT Commands Manual.

Command	Comment
NONE	

Updated AT Commands

This part lists the commands that have been modified in the firmware L10a00. For more information, refer to the command description in [1].

Command	Comment
NONE	

Deprecated AT Commands

This part lists the commands that are no more available in the firmware L10a00.

Command	Comment
NONE	

>> 7. Feature Description

This section normally lists the features added to the firmware L10a00.

»» 8. Certification Description

GCF-CC & PTCRB

The following table summarizes the certifications passed for this software version.

	GCF-CC	NAPRD.03
Airprime WISMO228	v3.35.0	v5.1

>> 9. Additional Information / Restrictions

This section lists additional information or restrictions that must be taken into account regarding the firmware L10a00.

ID	Description (What/When)	Impacted Domain	Impacted Sub-Domain
NONE			