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K5150 QuickStart Firmware v8.1

Release Notes

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Revision record

Date	Revision version	FW Version	HW Version	change Description	Author
2012-11-16	0.1	22.250.03.01.5011	CH1K5150M	Created for version	Wei Shuang
2012-12-12	0.2	22.260.03.02.5011	CH1K5150M	Change baseline	Wei Shuang
2012-12-26	0.3	22.260.03.02.5011	CH1K5150M	Pack the new webui and VMB	Wei Shuang
2013-01-15	1.0	22.260.03.04.5011	CH1K5150M	MBIM_CID_VF_LOCATION_IN FO function implement	Wei Shuang
2013-02-07	1.1	22.260.03.05.5011	CH1K5150M	MBIM_CID_STK_PAC MBIM_CID_STK_TERMINAL_R ESPONSE MBIM_CID_STK_ENVELOPE function implement Did not implement	Wei Shuang
2013-03-06	1.2	22.260.05.01.5011	CH1K5150M	Add CPC feature	Wei Shuang
2013-3-11	1.3	22.260.03.06.5011	CH1K5150M	USSD issue	Wei Shuang
2013-3-18	2.0	22.260.03.07.5011	CH1K5150M	2G regist long time	Wei Shuang
2013-3-28	3.0	22.260.03.08.5011	CH1K5150M	DNS set not align as help page	Wei Shuang
2013-5-28	4.0	22.260.03.09.5011	CH1K5150M	connect problem when set 2G only in GR network	Wei Shuang
2013-10-23	6.0	22.436.11.04.5011	CH1K5150M	Support CS Fallback feature Solve Mobile Number issue	Wei Shuang
2014-02-20	6.8	22.436.11.09.5011	CH1K5150M	1. Support WinBlue 2. Support ESM Flag 3. Network search: Vodafone shown as 0 4. After the Cell-Redirection to the Geran cell, data traffic isn't possible anymore	Qiao Kaijun



2014-03-12	7.0	22.436.11.11.5011	CH1K5150M	<ol style="list-style-type: none">1. VMBNotifier shows Concatenated SMS 3 times2. Wrong SmsType in concatenated short message parts3. Connection status "0"4. Suddenly VMB show that the SIM is missing after being unlocked with PIN5. During Network search VMB shows "Please insert SIM"6. After registered 2G or 3G, set network mode to 4G preferred, it will not re-search network	Qiao Kaijun
2014-07-24	7.6	22.436.11.16.5011	CH1K5150M	<ol style="list-style-type: none">1. Update V version	Zhangxiang mei
2015-01-24	8.0	22.436.11.20.5011	CH1K5150M	<ol style="list-style-type: none">1. Update V version2. Update the VMB to 10.3.409.46933-RC1_QS_4.10.08.00;3. Add Security updates function.	Zhangxiang mei
2015-04-08	8.1	22.436.11.23.5011	CH1K5150M	<ol style="list-style-type: none">1. Fix security upgrade issue.2. Add opensource declare.3. Update WebUI version.4. Update the ProfileMatchingFields to ProfileMatchingFields_v66.xls5. Update VMB version.6. Fix JIRA QHAD-3037. Fix JIRA QHAD-313	Zhangxiang mei



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K5150 Release Notes

1 Main Features

K5150 supports the following standards:

- FDD-LTE 800/1800/2600/2100/900MHz and HSPA+/ HSDPA/HSUPA/WCDMA(UMTS) 2100/1900/900/850 MHz and GSM/GPRS/EDGE 850/900/1800/1900 MHz
- LTE packet data service up to 150M(MBIM)/100Mbit/s(Downlink) and 50Mbit/s(Uplink)
- DC-HSPA+ packet data service of up to 43.2Mbit/s
- HSPA+/HSDPA packet data service of up to 21.6 Mbit/s
- HSUPA packet data service of up to 5.76 Mbit/s
- WCDMA PS domain data service of up to 384 Kbit/s
- EDGE packet data service of up to 236.8 Kbit/s
- GPRS packet data service of up to 85.6 Kbit/s
- QuickStart features (Driverless, Auto connect)
- Plug and play (PnP)
- Dual internal antenna
- USB Stick, easy to connect
- Micro Secure Digital Memory Card up to 32GB
- Standard USB interface, auto installation
- SMS based on CS/Packet Switched (PS) domain of GSM and WCDMA, supporting group sending of messages
- USSD service
- Convenient for use Windows XP/Windows Vista/Windows 7/Windows 8 (MBIM)/Linux/MAC operating system (OS)

2 Hardware

2.1 Version Description

Hardware version: CH1K5150M
Platform & Chipset : Balong Hi6920

2.2 Hardware specifications

Item	Specifications
Technical standard	<ul style="list-style-type: none">• LTE: 3GPP R9• HSPA+/UMTS:3GPP R99/R5/R6/R7/R8• GSM/GPRS/EGRPS :3GPP R99
External interfaces	USB interface: USB 2.0 high-speed interface
	LED: indicating the status of the network
	SIM/USIM card: standard 6-pin SIM card interface
Maximum transmitter power	FDD-LTE 800/1800/2600/2100/900 MHz: 23dBm +2/-2 (Power Class 3)
	HSPA+/HSUPA/HSDPA/UMTS 850/ 900/ 1900/ 2100 MHz: +24dBm +1/-3 (Power Class 3)
	GSM/GPRS 850/900MHz: +33dBm +/-2 (Power Class 4)
	GSM/GPRS 1800 MHz/1900MHz: +30dBm +/-2 (Power Class 1)
	EDGE 850/900MHz: +27dBm +/-3 (Power Class E2)
	EDGE 1800MHz/1900MHz: +26dBm +/-3 (Power Class E2)
Maximum power consumption	<3.5W (under testing now)
Power supply	5V / 500mA
Dimensions (D x W x H)	33.4mm*95.5mm*14.0mm
Weight	<35g
Temperature	<ul style="list-style-type: none">• Operating: -10℃ to +40℃• Storage: -20℃ to +70℃
Humidity	5% to 95%

2.3 Improvements in the previous version

No.	Description
NA	

2.4 Known limitations and issues

No.	Description
NA	

3 Firmware

3.1 Version Description

Firmware version: 22.436.11.23.5011

The firmware version supports the driver is Windows RNDIS
Driver 1.5.7.0

K5150 supports PID 0x1575 (RNDIS) and 0x14F8
(RNDIS+SD)

3.2 Software Specifications

Item	Specifications
Data service	<p>GPRS:</p> <ul style="list-style-type: none">• Uplink: 85.6 kbit/s• Downlink: 85.6 kbit/s <p>EDGE:</p> <ul style="list-style-type: none">• Uplink: 236.8 kbit/s• Downlink: 236.8 kbit/s <p>UMTS PS domain:</p> <ul style="list-style-type: none">• Uplink: 384 kbit/s• Downlink: 384 kbit/s <p>HSDPA:</p> <ul style="list-style-type: none">• 14.4 Mbit/s <p>HSUPA:</p> <ul style="list-style-type: none">• 5.76 Mbit/s <p>HSPA+:</p> <ul style="list-style-type: none">• 21.6 Mbit/s <p>DC HSPA+</p> <ul style="list-style-type: none">• Uplink: 5.76 Mbit/s• Downlink: 43.2 Mbit/s <p>LTE</p> <ul style="list-style-type: none">• Uplink: 50 Mbit/s• Downlink: 100 Mbit/s /150Mbit/s(MBIM)
SMS	SMS over SGS

3.3 Baseline Information

K5150 is based on Balong platform and the feature of LTD-FDD is supported. The current firmware version 22.436.11.23.5011;

3.4 Improvement in the previous version

Version: K5150 v8.1

No	Description
Firmware	22.436.11.23.5011
1	Update V version
2	Fix security upgrade issue.



3	Add opensource declare
4	Update WebUI version to 2.032.8341
5	Update the ProfileMatchingFields to ProfileMatchingFields_v66.xls
6	Update the VMB to 10.3.415.51183_4.10.09.00
7	Fix JIRA QHAD-303: Win7.MBN.GSM.TestSignalState fails with Error rate (0xff) with Firmware version (V7.0) -K5150
8	Fix JIRA QHAD-313: K5150 returns wrong MBIM_CID_DEVICE_CAPS on Win7 (MBIMDataClassLTE bit is not set)

Version: K5150 v8.0

No	Description
Firmware	22.436.11.20.5011
1	Update V version
2	Update the VMB to 10.3.409.46933-RC1_QS_4.10.08.00;
3	Add Security updates function.
4	Update the webui to 2.031.7945

Version: K5150 v7.6

No	Description
Firmware	22.436.11.16.5011
1	Update V version

Version: K5150 v7.0

No	Description
Firmware	22.436.11.11.5011
1	0033874: K4305: VMBNotifier shows Concatenated SMS 3 times (CR 405)
2	0036463: K5150 FW6.8: wrong SmsType in concatenated short message parts
3	0036399: Connection status "0"
4	0036294: Suddenly VMB show that the SIM is missing after being unlocked with PIN
5	0035218: K5150, K4606: During Network search VMB shows "Please insert SIM"

6	After registered 2G or 3G,set network mode to 4G preferred,it will not re-search network
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Version: K5150 v6.8

No	Description
Firmware	22.436.11.09.5011
1	Support WinBlue
2	Support ESM flag
3	0035893: Win8.1: Network search: Vodafone shown as 0
4	After the Cell-Redirection to the Geran cell, data traffic isn't possible anymore

Version: K5150 v6.0

No	Description
Firmware	22.436.11.04.5011
1	Support CS Fallback Feature
2	Solve Mobile Number issue

Version: K5150 v4.0

No	Description
Firmware	22.260.03.09.5011
1	0034769: Device is camped to the selected network BUT connection always fails
2	0034772 : K5150 Implementation of GetIPType and GetSupportedIPTypes
3	0016695 :ESM flag is set to "0" this is incorrect for VF-NL VF-NL needs the ESM flag to be set to "1".

Version: K5150 v3.0

No	Description
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Firmware	22.260.03.08.5011
1	Set NDS address align as help page

Version: K5150 v2.0

No	Description
Firmware	22.260.03.07.5011
1	16286: Delayed attach in EDGE cell , DUT needs long time
2	0034157: The export of the logs in the web ui does not work

Version: K5150 v1.3

No	Description
Firmware	22.260.03.06.5011
1	0034145: USSD in LTE network return ERROR CODE
2	0034081: Roaming connection not possible
3	0034080: Account type does not change when using prepaid sim
4	0034092: Automatically connect even when roaming to be unclicke
5	0033955: Missing DNS resolution with K5150 and IPv6 single stack connection
6	0034231: K5150 - Firmware v1.0 incorrectly shows firmware version on Windows 8
7	0034448: In LTE network, we can not use USSD service as 3G

Version: K5150 v1.1

No	Description
Firmware	22.260.03.05.5011
1	MBIM_CID_STK_PAC CID implement
2	MBIM_CID_STK_TERMINAL_RESPONSE CID implement
3	MBIM_CID_STK_ENVELOPE CID implement



4	0033695: connects after user's disconnect
5	0034081: Roaming connection not possible
6	0034080: Account type does not change when using prepaid sim
7	0034092: Automatically connect even when roaming to be unclicke
8	0033955: Missing DNS resolution with K5150 and IPv6 single stack connection

Version: K5150 v1.0

No	Description
Firmware	22.260.03.04.5011
1	MBIM_CID_VF_LOCATION_INFO CID implement

3.5 Known Limitations and Issues

3.5.1 Firmware Known Issues

ID	Severity	Summary
NA		

3.5.2 Unresolved Issue List

ID	Severity	Summary
NA		

4 WebUI

4.1 Version Description

WebUI version: 2.032.8341

4.2 WebUI Specifications

Item	Specifications
launch.html	1) When user plug-in the device to PC, PC will pop-up a browser redirecting to the http://vodafonemobile.api/html/launch.html 2) When user inputs "http://vodafonemobile.api" in the browser address, it will redirect to http://vodafonemobile.api/html/launch.html
launch.js	Check the sim-card status and redirect to the following page: 1) home.htm?startPage=pin-required; 2) home.htm?startPage=puk-required; 3) home.htm?startPage=puk-lock; 4) home.htm?startPage=sim-error; 5) home.htm
vendor.js	Support following functions: 1) connection 2) SIM PIN 3) Network 4) USSD 5) SMS 6) Device Control 7) Diagnostic 8) Language

4.3 Improvements in the previous version

Version : K5150 v8.1

Module	Description
webUI version	2.032.8341
1	NA

Version : K5150 v8.0

Module	Description
webUI version	2.031.7945
1	NA

Version : K5150 v7.6

Module	Description
webUI version	2.019.6384
1	NA

Version : K5150 v7.0

Module	Description
webUI version	2.019.6384
1	0036392: [WebUI 2.019.6384] Script error In IE.

Version : K5150 v6.8

Module	Description
webUI version	2.019.6384
1	Support ProfileMatchingFields_v55

Version : K5150 v4.0

Module	Description
webUI version	2.011.5784
34860	unexpected display battery and wifi information.
34875	the Input box of SMS page will be flashing always when write a long message with letters and numbers;

Version : K5150 v3.0

Module	Description
webUI version	2. 008. 5513
NA	

Version : K5150 v2.0

Module	Description
webUI version	2. 008. 5513
33671	there is something wrong with the sms group sending in K5150
33673	there is something wrong with the message characters count in K5150
34363	Let the test PC hibernate and wake up again. Check that the Dashboard software is restored after hibernating mode
34432	Webui reports failed to save beater when the device is in



	connecting in state but the save has worked;
34389	VMB displays a wrong message "your new PIN not match your current PIN"

Version : K5150 v1.1

Module	Description
webUI version	2.005.5348
33794	The picture on the home page is not correct with WebUI 2.003.5026, it is for hotspot, not for the quickstart

4.4 Known Limitations and Issues

4.4.1 WebUI Known Issues

No.	Description
35189	In Mobile Broadband Connection Settings page, need IPv6 DNS and DNS2 settings input-box
35211	In write sms page, it will delete the part of the context automatically when the input context exceeds the maximum length

4.4.2 Unresolved Issue List

Id	Severity	Summary
NA		

5 VMB Version

5.1 Version Description

Item	Version
Windows VMB	VMB10.3.415.51183
Mac VMB	4.10.09.00_ISO

5.2 Known Limitations and Issues

Id	Severity	Summary
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NA		
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6 Driver

6.1 Customizations

ID	Summary	Comment
1	FlashCard = QuickStart Update	ok
2	FCSRCDISK = QuickStart Update USB Disk (Huawei)	ok
3	FcDevice00 = QuickStart Update Diagnostics Port (Huawei)	ok
4	FcDevice01 = QuickStart Update Secondary Port (Huawei)	ok
5	FcDevice02 = QuickStart Update Serial Port (Huawei)	ok
6	FcDevice00 = QuickStart Update USB Device	ok
7	VRndisDeve = Vodafone Mobile Broadband Quickstart (Huawei)	ok

7 Flasher

7.1 Version Description

CUF Version : 31.115.03.11

7.2 Flasher Specifications

ID	Summary	Comment
1	Flasher will display firmware version as <product>_<firmware version>	
2	Flasher displays VMB version as <product>_<VMB Windows version>_<VMB Mac version>	
3	Flasher displays VMB and WebUI updater as <product>_<VMB Windows version>_<VMB Mac version>_<WebUI version>	