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B310s-22	CONFIDENTIAL
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V1.0	

B310s-22TCPU-V200R001B321D03SP00C738
Firmware Release Notes

Prepared by	B310s-22 Team	Date	2017-04-10



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Revision Record

Date	Revision version	FW-WebUI/HiLink Version	Change Description	Author
2017-4-10	1.0	FW 21.321.03.00.738	The 1 th Version	B310s-22 Team

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B310s-22 Firmware Release Notes

Abbreviations	description

1 Main Features

The B310s-22 mainly supports the following features:

- LTE FDD (DL) data service of up to 150 Mbit/s
- LTE FDD (UL) data service of up to 50 Mbit/s
- LTE TDD (DL) data service of up to 112 Mbit/s
- LTE TDD (UL) data service of up to 10 Mbit/s
- DC-HSPA+ (DL) data service of up to 42 Mbit/s
- HSPA+ (DL) data service of up to 21.6 Mbit/s
- HSDPA (DL) data service of up to 14.4 Mbit/s
- HSUPA (UL) data service of up to 5.76 Mbit/s
- UMTS data service of up to 384 kbit/s
- EDGE data service of up to 236.8 kbit/s
- EDGE data service of download to 296 kbit/s
- GPRS data service of up to 85.6 kbit/s
- PS domain data service based on LTE/UMTS/GSM
- SMS based on CS/PS domain of GSM and UMTS, CS domain of LTE
- Wi-Fi
- Support for HUAWEI Mobile WiFi App
- Press and Play
- IPv6v4 /IPv4 dual stack
- Built-in DHCP Server, DNS RELAY and NAT
- Online software upgrade
- Traffic statistic
- LED indicators
- Built-in UMTS and WLAN high gain antenna LTE/GSM
- Windows XP SP3, Windows Vista SP1/SP2, Windows 7, Windows 8, Windows 8.1 (does not support Windows RT), MAC OS X 10.7, 10.8 and 10.9 with latest upgrades



2 Hardware

2.1 Version Description

Hardware Version:	WL1B310FM03 (B310s-22)
Platform & Chipset:	Balong Hi6921 & AR 8035

2.2 Hardware Specifications

Item	Specifications	
Technical standard	WAN: LTE/ DC-HSPA+/HSPA+/HSPA/UMTS/EDGE/GPRS/GSM	
	WLAN: IEEE 802.11b/g/n	
Operating frequency	LTE: B1/B3/B7/B8/B20/B38	
	HSPA+/HSPA/UMTS: B1/B8	
	EDGE/GPRS/GSM: 1900/1800/900/850 MHz	
	WLAN: 2.4 GHz	
Internal memory	512 MB Flash,256 MB Memory	
Maximum transmitter power	UMTS: 24 (+1/-3) dBm	
	WLAN	802.11b: 16 dBm
		802.11g: 17 dBm
		802.11n: 17 dBm
Receiver sensitivity	UMTS: Confirm to 3GPP Requirements	
	WLAN 802.11b	-76 dBm @11 Mbit/s
		-82 dBm @1 Mbit/s
	WLAN 802.11g: -65 dBm @54 Mbit/s	
	WLAN 802.11n: -64 dBm @65 Mbit/s	
WLAN speed	802.11b: Up to 11 Mbit/s	
	802.11g: Up to 54 Mbit/s	
	802.11n: HT40 MCS15(300Mbit/s), HT20 MCS15(144.4Mbit/s)	
Maximum power consumption	12 W	
Power supply	AC: 100–240 V	
	DC: 12 V, 1 A	
External interfaces	WAN/LAN: 1 RJ45,GE	
	FXS:1 RJ11	
	SIM card interface: standard 6-pin SIM card interface	

Item	Specifications	
Indicators	Mode:	cyan: 4G mode blue: 3G mode yellow: 2G mode green: WAN mode Red: No SIM/USIM card is found, the PIN is not verified, or the SIM/USIM card is not working properly. Failed to connect to a mobile network
	Signal	One to three: Weak to Strong signal Off: out signal
	WPS/WIFI	White Blink: WPS open White Steady On: 2.4G WiFi is opened Off: 2.4G WiFi is closed
	LAN	On/Off
	Power	On/Off
Button	Power switch, Reset switch, WPS switch	
Antenna	<ul style="list-style-type: none"> ● Built-in GSM/UMTS/LTE main diversity antenna ● Built-in GSM/UMTS/LTE diversity antenna ● Built-in WLAN antenna 	
Dimensions (D × W × H)	180 mm x126 mm x38mm	
Weight	about 226 g (Does not contain the power adapter)	
Temperature	Operating: 0°C to +40°C	
	Storage: -20°C to +70°C	
Humidity	5% to 95% (non-condensing)	

2.3 Improvements in the Previous Version

Index	Case ID	Issue Description
NA		



2.4 Known Limitations and Issues

Index	Case ID	Issue Description
NA		

3 Firmware

3.1 Version Description

Firmware Version:	21.321.03.00.738
Baseline information	BalongV700R110C30B321
OS	VxWorks 6.8+linux 3.4.5

3.2 Firmware Specifications

Item	Description
Authentication of WIFI	<ul style="list-style-type: none">• Authentication of WiFi: WPA/WPA2-PSK• Encryption of WiFi: TKIP + AES• WLAN Country: All
Cs Voice	<ul style="list-style-type: none">• support
Network Mode	<ul style="list-style-type: none">• Display network mode list as below:• Auto• 4G only• 3G only• 3G/2G only• 2G only
HTTPS remote management through WAN interface	<ul style="list-style-type: none">• HTTPS remote management with port 61443
https remote access	<ul style="list-style-type: none">• 1)default enable• 2)no IP limitations• 3)customer can edit/remove this rule

Item	Description
CLIP Mode	<ul style="list-style-type: none"> • FSK as per ITU-T-V.23 • ETSI ETS 300 659-1 (2001), ETSI ETS 300 778-1 (1997) • 1300Hz ± 1.5% 2100Hz ± 1.5% 1200bps ±1% • Initial ringing signal 350-400 ms • FSK generating level -13.5 dBm± 1.5 dB,
WLAN and LAN DCHP Network Addresses	192.168.1.2 - 192.168.1.100
DHCP editable	<ul style="list-style-type: none"> • all of four parts of IP address can be edited(192.168.X.X ---> X.X.X.X) • the last two parts of subnet mask can be edited (255.255.255.0 ---> 255.255.Y.Y)
NAT Switch	<p>1.Add NAT Switch in NAT Settings page.</p> <p>there has two options: Enabled, Disabled. default as enabled. Refer to the right screenshot.</p> <p>2.When set NAT switch as Disabled,pls also check the box of "Enable LAN to LAN ping pass WAN" in Firewall Switch page.</p> <p>ping LAN to LAN function as below:</p> <p>1) add a select box,it can open or close the "Enable LAN to LAN ping pass WAN" function ;</p> <p>2) add simple introduction: “ Enable LAN to LAN ping pass WAN function will enable the outer LAN which is connected through WAN to ping LAN through local CPE.” ;</p> <p>3) when select this function ,the webUI need display a warning message:</p> <p style="padding-left: 40px;">"WARNING! Kindly be informed that enabling this function will decrease the security of the CPE, which may allow outer interference. "</p> <p>4) “Enable LAN to LAN ping pass WAN” function as below:</p> <p style="padding-left: 40px;">the two LANs(LAN1 & LAN2) gateway also use B310s-22,</p> <p style="padding-left: 40px;">need support PC1(in LAN1) ping PC2(in LAN2) enable;</p> <p style="padding-left: 40px;">need support PC2(in LAN2) ping PC1(in LAN1) enable.</p> <p>5) need support transfer TCP and UDP data between LAN1 and LAN2.</p>
	<ul style="list-style-type: none"> •



Item	Description
	•

3.3 Improvement in the Previous Version

Index	Case ID	Issue Description
1		<i>First custom</i>

3.4 Known Limitations and Issues

Index	Case ID	Issue Description
		<i>NA</i>

4 WebUI

4.1 Version Description

WebUI Version: 17.100.09.00.03

4.2 WebUI/HiLink Specifications

Item	Specifications

4.3 Improvement in the Previous Version

Index	Case ID	Issue Description
		<i>First custom</i>

4.4 Known Limitations and Issues

Index	Case ID	Issue Description
		NA

5 Software Vulnerabilities Fixes

Softwar	Version	CVE ID	Vulnerability	Solution
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e/Module name			Description	