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E6878-870	CONFIDENTIAL
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V1.5	

E6878-870 10.0.3.1(H563SP11C233)

Firmware Release Notes V1.5

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Revision Record

Date	Revision version	FW-WebUI/HiLink Version	Change Description	Author
2019-11-19	1.0	FW E6878-870 10.0.3.1(H557SP5C233) WEBUI 10.0.3.1(W11SP31C233)	The 1 st Version	E6878-870 Team
2019-11-29	1.1	FW E6878-870 10.0.3.1(H557SP23C233) WEBUI 10.0.3.1(W11SP33C233)	The 2 st Version	E6878-870 Team
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2020-1-15	1.5	E6878-870 10.0.3.1(H563SP11C233) WEBUI 10.0.3.1(W11SP54C233)	The 5 st Version	E6878-870 Team

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HUAWEI E6878-870 Firmware Release Notes

Abbreviations	Description

1 Main Features

The E6878-870 supports the following standards:

- LTE FDD Cat4 (DL) packet data service of up to 150 Mbps
- LTE FDD Cat6 (DL) packet data service of up to 300 Mbps
- LTE FDD Cat5 (UL) packet data service of up to 75 Mbps
- LTE TDD Cat4 (DL) packet data service of up to 112 Mbps
- LTE TDD Cat6 (DL) packet data service of up to 224 Mbps
- LTE TDD (UL) packet data service of up to 10 Mbps
- 5G (UL) packet data service of up to 250 Mbps (if the downlink-uplink ratio is 8:2)
- 5G (UL) packet data service of up to 1.65 Gbps (if the downlink-uplink ratio is 8:2)
- SMS (SMS over SGs)
- Built-in 5G/LTE and Wi-Fi antenna
- 2.4 GHz and 5 GHz Wi-Fi (non-simultaneous)
- 5G/LTE/Wi-Fi auto offload
- Menu display
- Compatible with the HUAWEI AI Life app (Android) and HUAWEI SmartHome app (iOS)
- IPv4v6 dual stack
- Built-in DHCP Server, DNS RELAY, and NAT
- Online software upgrade
- Traffic statistics
- WPS
- 1.45 inch LCD display
- Type-C port
- Compatible with Windows 7, Windows 8, Windows 8.1, Windows 10 (excluding Windows RT), MAC OS X 10.9, 10.10, 10.11 and 10.12 with latest upgrades

2 Hardware

2.1 Version Description

Hardware Version:

CL2E6878M



Platform & Chipset:

Balong5000C11B563

2.2 Hardware Specifications

Item	Specifications	
Technical standard	WAN: 5G NR/LTE/3GPP Rel 15	
	Wi-Fi/WLAN: IEEE 802.11a/b/g/n/ac	
Operating frequency	5G: n41/ n77/ n78/ n79(4800–4900 MHz)	
	LTE FDD: B1,B3,B5,B7,B8,B20,B28,B32	
	LTE TDD: B34,B38,B39,B40,B41,B42	
	Wi-Fi/WLAN: 2.4 GHz	
Transmit power	Wi-Fi/WLAN: 5 GHz	
	LTE: Conforms to Power Class 3 Definition	
	5G: Conforms to Power Class 3 Definition	
	Wi-Fi/WLAN 2.4 GHz	802.11b: 14.5 dBm
		802.11g: 14 dBm
		802.11n: 14(20 MHz/40 MHz) dBm
	Wi-Fi/WLAN 5 GHz	802.11a: 14.5 dBm
		802.11ac: 14.5 (20 MHz)/15.5 (40 MHz)/10(80 MHz) dBm
		802.11n: 14.5(20 MHz)/15.5(40 MHz) dBm
	Note: The value above represents a typical transmit power in Wi-Fi/WLAN mode, and may vary slightly by device.	
Receiver sensitivity	LTE: Conforms to 3GPP	
	5G: Conforms to 3GPP	
	Wi-Fi/WLAN 2.4 GHz	802.11b: -85 dBm @11 Mbps
		802.11g: -72 dBm @54 Mbps
		802.11n: -70 dBm @65 Mbps
	Wi-Fi/WLAN 5 GHz	802.11a: -75 dBm @54 Mbps
		802.11n: -73 dBm @65 Mbps
		802.11ac: -64 dBm @180 Mbps
	Note: The sensitivity data above represent the typical values, and may vary slightly by device.	
Wi-Fi/WLAN speed	802.11a: Up to 54 Mbps	
	802.11b: Up to 11 Mbps	
	802.11g: Up to 54 Mbps	

Item	Specifications	
	802.11n	HT20: Supports MCS0–MCS7; Up to 72.2 Mbps. Supports MCS8–MCS15; Up to 144.4 Mbps. HT40: Supports MCS0–MCS7; Up to 150 Mbps. Supports MCS8–MCS15; Up to 300 Mbps.
	802.11ac: Up to 867 Mbps	
Battery	Type: Rechargeable lithium battery (non-removable)	
	Typical capacity: 4000 mAh (actual capacity may be slightly smaller)	
External ports	USB Type-C port	
	nano-SIM card slot (4FF)	
Display	1.45 inch LCD display	
Buttons	Power button, Menu button	
Antenna	Built-in 5G/LTE antenna	
Dimensions	148 mm x 72 mm x 12.15 mm	
Weight	Approximately 180 g	
Temperature	Operating temperature: 0°C to +35°C	
	Storage temperature: – 20°C to +60°C	
Humidity	5% to 95% (non-condensing)	

2.3 Software specifications

Item	Description
SMS	<ul style="list-style-type: none"> • Write/send/receive short messages • Send/receive extra-long messages • Storage: Up to 500 messages can be saved in the internal memory of the E6878-870
Network connection setup	<ul style="list-style-type: none"> • Create, delete, or edit APN • Set up network connection
WLAN/Wi-Fi setup	<ul style="list-style-type: none"> • SSID broadcasting and hiding • None (Open), WEP, WPA2-PSK, and WPA/WPA2-PSK encryption • Automatic adjustment of Wi-Fi speed • Display STA status • MAC address filtering

Item	Description
Firewall setup	<ul style="list-style-type: none"> • Enable and disable firewall • LAN IP Filtering • Virtual Server • DMZ • UPnP
NAT setup	<ul style="list-style-type: none"> • CONE NAT • Symmetric NAT • ALG
DHCP setup	<ul style="list-style-type: none"> • Enable and disable DHCP server • Configure DHCP server address pool • Set DHCP lease time
5G/LTE/Wi-Fi auto offload (Wi-Fi Extender)	<ul style="list-style-type: none"> • Access WAN via 5G/LTE/Wi-Fi
IPv4v6 dual stack	<ul style="list-style-type: none"> • DHCPv4v6 server and client • DNSv4v6 server and client • Display IPv4v6 WAN address
Others	Network connection settings: Automatic/manual network selection and registration
	Display network status including signal strength, carrier name, system mode, and so on
	Select network mode
	PIN management: activate/deactivate PIN, verify PIN/PUK, and modify PIN
System requirements	<ul style="list-style-type: none"> • Windows 7, Windows 8, Windows 8.1, Windows 10 (excluding Windows RT). Mac OS X 10.9, 10.10, 10.11 and 10.12 with latest updates • Your computer should also meet the recommended hardware requirements for the operating system installed

2.4 Issues in the Previous Version

Index	Case ID	Issue Description
Hardware Version	CL2E6878M	
Previous Hardware Version	Pre-verification Samples	
NA		



2.5 Limitations and Issues

Index	Case ID	Issue Description
NA		

3 Firmware

3.1 Version Description

Firmware Version: E6878-870 10.0.3.1(H563SP11C233)
Baseline information Balong5000C11B563

3.2 Improvement in the Previous Version

Index	Case ID	Issue Description

4 Web UI

4.1 Version Description

Web UI Version: 10.0.3.1(W11SP54C233)

4.2 Web UI Specifications

Item	Specifications

4.3 Known Limitations and Issues

index	Case ID	Specifications

4.4 Software Vulnerabilities Fixes

Software/ Module name	CVE ID	Vulnerability Description	Impact Description
linux_kerne	CVE-2019-16994	In the Linux kernel before 5.0, a memory leak exists in sit_init_net() in net/ipv6/sit.c when register_netdev() fails to register sitn->fb_tunnel_dev, which may cause denial of service, aka CID-07f12b26e21a.	Successful exploitation of these vulnerabilities could lead to disclosure of sensitive information, addition or modification of data, or Denial of Service (DoS).
linux_kerne	CVE-2019-18198	In the Linux kernel before 5.3.4, a reference count usage error in the fib6_rule_suppress() function in the fib6 suppression feature of net/ipv6/fib6_rules.c, when handling the FIB_LOOKUP_NOREF flag, can be exploited by a local attacker to corrupt memory, aka CID-ca7a03c41753	Successful exploitation of these vulnerabilities could lead to disclosure of sensitive information, addition or modification of data, or Denial of Service (DoS).
linux_kerne	CVE-2019-2182	In the Linux kernel before 5.3.4, a reference count usage error in the fib6_rule_suppress() function in the fib6 suppression feature of net/ipv6/fib6_rules.c, when handling the FIB_LOOKUP_NOREF flag, can be exploited by a local attacker to corrupt memory, aka CID-ca7a03c41753.	Successful exploitation of these vulnerabilities could lead to disclosure of sensitive information, addition or modification of data, or Denial of Service (DoS).
linux_kerne	CVE-2019-18805	Multiple NetApp products incorporate Linux kernel. Linux kernel versions through 5.3.12 are susceptible to vulnerabilities which when successfully exploited could lead to disclosure of sensitive information, addition or modification of data, or Denial of Service (DoS).	Successful exploitation of these vulnerabilities could lead to disclosure of sensitive information, addition or modification of data, or Denial of Service (DoS)