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| --- | --- |
| Product name | Confidentiality level |
| E6878-870 | CONFIDENTIAL |
| Product version | Total 11pages |
| V1.5 |

E6878-870 10.0.3.1(H563SP11C233) Firmware Release Notes V1.5

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| --- | --- | --- | --- |
| Prepared by | E6878-870 Team | Date | 2019-11-29 |
| Reviewed by | E6878-870 Team | Date | 2019-11-29 |
| Approved by | E6878-870 Team | Date | 2019-12-04 |
| Approved by | E6878-870 Team | Date | 2019-12-31 |



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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)](javascript:;) | The 1st Version | E6878-870 Team |
| 2019-11-29 | 1.1 | FW  E6878-870 10.0.3.1(H557SP23C233)  [WEBUI 10.0.3.1(W11SP33C233)](javascript:;) | The 2st Version | E6878-870 Team |
| 2019-12-2 | 1.2 | E6878-870 10.0.3.1(H557SP23C233)  WEBUI 10.0.3.1(W11SP36C233) | The 3st Version | E6878-870 Team |
| 2019-12-4 | 1.3 | E6878-870 10.0.3.1(H557SP27C233)  WEBUI 10.0.3.1(W11SP37C233) | The 3st Version | E6878-870 Team |
| 2019-12-31 | 1.4 | E6878-870 10.0.3.1(H563SP1C233)  WEBUI 10.0.3.1(W11SP51C233) | The 4st Version | E6878-870 Team |
| 2020-1-15 | 1.5 | E6878-870 10.0.3.1(H563SP11C233)  WEBUI 10.0.3.1(W11SP54C233) | The 5st Version | E6878-870 Team |

Table of Contents

[1 Main Features 4](#_Toc28854832)

[2 Hardware 4](#_Toc28854833)

[**2.1** **Version Description** 4](#_Toc28854834)

[**2.2** **Hardware Specifications** 5](#_Toc28854835)

[**2.3 Software specifications** 6](#_Toc28854836)

[**2.4** ents in the Previous Version 7](#_Toc28854837)

[**2.5** **Limitations and Issues** 8](#_Toc28854838)

[3 Firmware 8](#_Toc28854839)

[**3.1** **Version Description** 8](#_Toc28854840)

[**3.2** Improvement in the Previous Version 8](#_Toc28854841)

[4 Web UI 8](#_Toc28854842)

[**4.1** **Version Description** 8](#_Toc28854843)

[**4.2** **Web UI Specifications** 8](#_Toc28854844)

[**4.3** **Known Limitations and Issues** 8](#_Toc28854845)

[**4.4** Software Vulnerabilities Fixes 9](#_Toc28854846)

**HUAWEI E6878-870 Firmware Release Notes**

|  |  |
| --- | --- |
| Abbreviations | Description |
|  |  |
|  |  |

# 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

# Hardware

## **Version Description**

|  |  |
| --- | --- |
| Hardware Version: | **CL2E6878M** |
| Platform & Chipset: | Balong5000C11B563 |

## **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 | |
| Wi-Fi/WLAN: 5 GHz | |
| Transmit power | 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 | |
| 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 | * 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 | * Create, delete, or edit APN * Set up network connection |
| WLAN/Wi-Fi setup | * 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 |
| Firewall setup | * Enable and disable firewall * LAN IP Filtering * Virtual Server * DMZ * UPnP |
| NAT setup | * CONE NAT * Symmetric NAT * ALG |
| DHCP setup | * Enable and disable DHCP server * Configure DHCP server address pool * Set DHCP lease time |
| 5G/LTE/Wi-Fi auto offload (Wi-Fi Extender) | * Access WAN via 5G/LTE/Wi-Fi |
| IPv4v6 dual stack | * 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 | * 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 |

## ents in the Previous Version

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

## **Limitations and Issues**

| Index | Case ID | Issue Description |
| --- | --- | --- |
| NA |  |  |

# Firmware

## **Version Description**

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

## Improvement in the Previous Version

|  |  |  |
| --- | --- | --- |
| **Index** | **Case ID** | **Issue Description** |
|  |  |  |

# Web UI

## **Version Description**

|  |  |  |
| --- | --- | --- |
| Web UI Version: | 10.0.3.1(W11SP54C233) |  |

## **Web UI Specifications**

| Item | Specifications |
| --- | --- |
|  |  |

## **Known Limitations and Issues**

|  |  |  |
| --- | --- | --- |
| **index** | **Case ID** | **Specifications** |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

### 

## 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) |