



# 5G industrial wireless routers

Model: LBT-T300

Version: HW3-CN-5GA-W5-RS485

## Product Introduction:

The 5G industrial-grade router is an IoT gateway device that supports multiple ways of accessing the Internet (Ethernet/Wi-Fi client/5G), various local data access (WIFI 2.4G/5.8G/Ethernet/(customizable RS232/RS485)), and full-stack intelligent protocols. The device is equipped with wide-area network communication, VPN tunnels, WIFI local networks, and transparent transmission of RS232/485 functions, and provides customers with open-source codes for various device compatibility, enabling seamless connections of wireless local networks, Ethernet, intelligent hardware, and wireless wide-area networks, providing users with high-speed, secure, and reliable access services. It supports WEB configuration mode, which is convenient and simple to manage, and supports remote cloud control.

| Countries   | 4G/5G network solutions  | Wireless network                                | Number of slots                   | Serial port Protocol  | Custom content           |
|---|--|---|-----------------------------------|-----------------------|--------------------------|
| CN= China Version<br>EU= European version<br>NA= North American version<br>GL= Global Edition<br>SA= South American version<br>JP= Japanese version<br>AU= Australian version | A= Domestic<br>Q= Qualcomm<br>V=4G private network<br>R=Redcap<br>H= hisilicon | W0= No WiFi<br>W4=WiFi4<br>W5=WiFi5<br>W6=WiFi6 | S1= Single card<br>S2= Dual cards | RS232<br>RS485<br>TTL | DO<br>POE<br>GPS<br>ESIM |

Example: HW3-CN-5GA-W5-S1-RS485; Version HW3, China 5G domestic solution, single band WiFi5, single card, protocol RS485, no customization

Note: Some versions do not allow customization of the above content.

## ○ Hardware parameters

|                             |  |
|-----------------------------|--|
| Product size                | 284*195*76mm (Length×Width×Height)   |
| Power supply                | POE power supply: 48V/0.5A, DC power supply: 7-35V/1A  |
| GPS                         | Customizable GNSS positioning module, supporting RTK technology, and capable of using a variety of satellite systems (GPS, GLONASS, Beidou, WAAS, EGNOS, MSAS, GAGAN) as a mixed engine.   |
| External interface          | Reset key: 1<br>Indicator lights: 6<br>Antenna interface: 4-5 (optional)<br>RS232/485 interface: 1 (3.5mm 6PIN connector)<br>USB2.0: for connecting USB cameras without drivers, sharing files<br>Ports: 1(1 LAN ~ 1 POE), 3KV lightning protection (optional), POE input (optional)<br>Protection level: IP66 |
| Protection grade            |  |
| Antenna                     | N-headed female connector  |
| Storage memory              | Storage :16MB, memory: 128MB   |
| Authentication              | CE, FCC, CCC   |
| Power consumption (current) | 5G: less than 800mA  |
| Operating temperature       | Operating temperature: -20 to +70 ° C<br>Storage temperature: -40 to +80 ° C   |
| Humidity                    | Humidity: 5 to 95% (non-condensing)  |

## ○ Product packaging size/weight

|                                |                  |
|--------------------------------|------------------|
| Product weight (g)             | 552g             |
| Product dimensions (mm)        | 284*195*76mm     |
| Packaging size (cm)            | 385*220*64cm     |
| Product packaging weight (kg)  | 1kg              |
| Outer box dimensions (cm)      | 71.3*44.3*26.8cm |
| Container weight estimate (kg) | 22kg             |

## ○ Feature Data

|                                       |   |        |  |               |                              |            |                    |        |   |                         |                                |                           |   |        |  |
|---------------------------------------|---|--------|--|---------------|------------------------------|------------|--------------------|--------|---|-------------------------|--------------------------------|---------------------------|---|--------|--|
| Basic Features                        | Internet Protocol: 4G /5G dial-up DHCP/Static /PPPoE dial-up /WiFi relay<br>Number of supported users: Wired: 253, wireless: 60<br>WiFi Protocol: IEEE802.11b/g/n<br>Network functions: NAT, DNAT, DMZ, port forwarding<br>Port protocols: MODBUS, MODBUS slave, MQTT gateway   |        |  |               |                              |            |                    |        |   |                         |                                |                           |   |        |  |
| VPN                                   | OpenVPN Client、IPSecVPN Client、PPTP VPN Client、L2TP VPN Client  |        |  |               |                              |            |                    |        |   |                         |                                |                           |   |        |  |
| Operating frequency band              | 2412-2472MHz、5180-5825Mhz   |        |  |               |                              |            |                    |        |   |                         |                                |                           |   |        |  |
| WiFi transmission Rate/Data           | Transmission Rate: 1800 Mbps (MAX)<br>Wi-Fi Data:<br>2.4G Speed: 573 Mbps (Max)<br>2.4G Power: 21 dB (-2 dBm+)<br>5.8G Speed: 1201 Mbps (Max)<br>5.8G Power: 21 dB (-2 dBm+)  |        |  |               |                              |            |                    |        |   |                         |                                |                           |   |        |  |
| Firmware customization                | Operating System: Linux operating system based on OpenWrt<br>Supported languages: BusyBOS shell,Lua,C,C++<br>Development tools: Provide SDK packages with built-in environments and contact us for custom development based on requirements documentation   |        |  |               |                              |            |                    |        |   |                         |                                |                           |   |        |  |
| WLAN Security Consultative            | OpenSystem, WPA-PSK, WPA2-PSK, WPAPSK/WPA2 PSK, WPA1 / WPA2   |        |  |               |                              |            |                    |        |   |                         |                                |                           |   |        |  |
| System Services                       | Virtual servers, port triggers, serial port services, firewalls, MAC filtering, access control, port blocking, regional Settings, factory reset, NTP server Settings, backup system information, software upgrades, remote management   |        |  |               |                              |            |                    |        |   |                         |                                |                           |   |        |  |
| Operating system Browser Requirements | System :Windows XP/VISTA, Linux 2.6, Windows 7 ,<br>MAC OS: 1.0.3.7 ; Browser :IE:6.0 Safari:1.2.4<br>Firefox:2.0.0.8   |        |  |               |                              |            |                    |        |   |                         |                                |                           |   |        |  |
| Device Management                     | <table border="1"> <tr> <td>WEB UI</td> <td>HTTP/HTTPS, status, configuration, local firmware updates, troubleshooting, Syslog</td> </tr> <tr> <td>FOTA upgrades</td> <td>Cloud platform server update</td> </tr> <tr> <td>SSH/TELNET</td> <td>SSH(v1,v2), telnet</td> </tr> <tr> <td>TR-069</td> <td>OpenACS, EasyCwm p, ACSLite, tGem, Libre ACS, Genie ACS, Free ACS, LibCWMP, Friendly tech(customizable)</td> </tr> <tr> <td>SNMP Network Management</td> <td>SNMP(v1, v2, v3)(customizable)</td> </tr> <tr> <td>Remote Interface Protocol</td> <td>API management based on HTTP/HTTPS (customizable)</td> </tr> <tr> <td>MODBUS</td> <td>MODBUS TCP Status/Control (customizable)</td> </tr> </table> | WEB UI | HTTP/HTTPS, status, configuration, local firmware updates, troubleshooting, Syslog | FOTA upgrades | Cloud platform server update | SSH/TELNET | SSH(v1,v2), telnet | TR-069 | OpenACS, EasyCwm p, ACSLite, tGem, Libre ACS, Genie ACS, Free ACS, LibCWMP, Friendly tech(customizable) | SNMP Network Management | SNMP(v1, v2, v3)(customizable) | Remote Interface Protocol | API management based on HTTP/HTTPS (customizable) | MODBUS | MODBUS TCP Status/Control (customizable) |
| WEB UI                                | HTTP/HTTPS, status, configuration, local firmware updates, troubleshooting, Syslog  |        |  |               |                              |            |                    |        |   |                         |                                |                           |   |        |  |
| FOTA upgrades                         | Cloud platform server update  |        |  |               |                              |            |                    |        |   |                         |                                |                           |   |        |  |
| SSH/TELNET                            | SSH(v1,v2), telnet  |        |  |               |                              |            |                    |        |   |                         |                                |                           |   |        |  |
| TR-069                                | OpenACS, EasyCwm p, ACSLite, tGem, Libre ACS, Genie ACS, Free ACS, LibCWMP, Friendly tech(customizable)   |        |  |               |                              |            |                    |        |   |                         |                                |                           |   |        |  |
| SNMP Network Management               | SNMP(v1, v2, v3)(customizable)  |        |  |               |                              |            |                    |        |   |                         |                                |                           |   |        |  |
| Remote Interface Protocol             | API management based on HTTP/HTTPS (customizable)   |        |  |               |                              |            |                    |        |   |                         |                                |                           |   |        |  |
| MODBUS                                | MODBUS TCP Status/Control (customizable)  |        |  |               |                              |            |                    |        |   |                         |                                |                           |   |        |  |

## ○ Interface



## ○ Optional frequency bands

4G band

CN: FDD-LTE B1/3/5/8  
 TDD-LTE B38/39/40/41  
 EU: FDD-LTE B1/3/5/7/8/20  
 TDD-LTE B38/39/40/41  
 AU:FDD-LTE B1/3/5/7/8/20/28  
 TDD-LTE B38/40/41  
 NA: FDD-LTE B2/3/4/5/7/8/12/13/17/25/26/66  
 TDD-LTE B41  
 SA: FDD-LTE B2/4/5/7/8/28  
 TDD-LTE B40  
 J: FDD-LTE B1/3/8/18/19/26  
 TDD-LTE 41  
 GL: FDD-LTE B1/2/3/4/5/7/8/17/20/28  
 TDD-LTE B38/39/40/41

5G band  
 (Optional)

CN: 5G NR NSA:N41/78/79  
 5G NR SA:N1/8/28/41/78/79  
 LTE-FDD B1/3/5/8  
 LTE-TDD: B34/38/39/40/41  
 EA: 5G  
 SA&NSA:N1/3/5/7/8/20/28/38/40/41/71/77/78/79  
 LTE-FDD: B1/3/5/7/8/18/19/20/28/32  
 LTE-TDD: B34/38/39/40/41/42  
 GL5G NR SA:  
 n1/2/3/5/7/8/12/20/25/28/38/40/41/48/66/71/77/78/79  
 5G NR NSA: n38/41/77/78/79  
 LTE-FDD:  
 B1/2/3/4/5/7/8/12/13/14/17/18/19/20/25/26/28/29/30/32/66/71  
 LTE-TDD: B34/38/39/40/41/42/43/48

## ○ Standard accessories



Power adapter \*1



2 m suction cup antenna -  
 WiFi



2 m suction cup antenna -4G  
 (Optional cabinet antenna, rubber stick  
 antenna, etc.)



Certificate of conformity \*1