



## 4G /5G industrial wireless routers

Model: T300

Version: HW5-1800-CN-5GA-W6-RS485&RS232

### Product Introduction:

The 4G/5G industrial-grade wireless router is a high-performance wireless communication product developed by Shenzhen **Libtor** Technology Co., Ltd. based on the requirements of 4G/5G networks. It is mainly used for data transmission services for industry users, supporting transparent data transmission, image transmission, equipment monitoring, and wireless internet access functions.

The 4G/5G industrial-grade wireless router uses an embedded high-performance CPU, which can effortlessly handle advanced applications such as routing and security. It can be paired with various 4G/5G industrial communication modules (TDD-LTE/FDD-LTE networks, 5G-SA/NSA). It provides 10/100/1000Mbps Ethernet ports, WIFI wireless interfaces, and serial ports. It can be connected to various terminal devices.

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: HW5-1800-CN-5GA-W6-S1-RS485&232; Version HW5-1800, China 5G domestic solution, single band WiFi6, single card, protocol RS485&232, no customization

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

○ Hardware parameters

|                                |                                                                                                                                                                                                                                     |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product size                   | 274.5*194.5*80mm (Length×Width×Height)                                                                                                                                                                                              |
| Power supply                   | Default POE power supply: 48V, or DC power supply: 7 - 35V                                                                                                                                                                          |
| 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: 1-8 (optional)<br>SIM card slot: 1<br>DC power supply interface: 1 (2.1mm round power connector)                                                                          |
| Protection grade               | RS232/485 interface: 1 (3.5mm 6PIN connector)<br>USB2.0: for connecting USB cameras without drivers, sharing files<br>Ports: 2 (1 LAN ~ 1 POE), 3KV lightning protection (optional), POE input (optional)<br>Protection level: IP66 |
| Antenna                        | Built-in antenna                                                                                                                                                                                                                    |
| Storage memory                 | Storage :16MB, memory: 128MB                                                                                                                                                                                                        |
| Authentication                 | CE, FCC                                                                                                                                                                                                                             |
| Power consumption (current)    | 4G: less than 400 mA 5G: less than 800mA                                                                                                                                                                                            |
| Operating temperature Humidity | Operating temperature: -20 to +70 ° C<br>Storage temperature: -40 to +80 ° C<br>Humidity: 5 to 95% (non-condensing)                                                                                                                 |

○ Product packaging size/weight

|                                |                  |
|--------------------------------|------------------|
| Product weight (g)             | 552g             |
| Product dimensions (mm)        | 274.5*194.5*80mm |
| 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                                                                                                                                                              |                                                                                                         |
|                                       | Number of supported users: Wired: 253, wireless: 128                                                                                                                                                                                  |                                                                                                         |
|                                       | WiFi Protocol: IEEE802.11b/g/n                                                                                                                                                                                                        |                                                                                                         |
|                                       | Network functions: NAT, DNAT, DMZ, port forwarding                                                                                                                                                                                    |                                                                                                         |
| VPN                                   | Port protocols: MODBUS, MODBUS slave, MQTT gateway                                                                                                                                                                                    |                                                                                                         |
|                                       | 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)                                                                                                                                                                                                    |                                                                                                         |
|                                       | Wi-Fi Data:                                                                                                                                                                                                                           |                                                                                                         |
|                                       | 2.4G Speed: 573 Mbps (Max)                                                                                                                                                                                                            |                                                                                                         |
|                                       | 2.4G Power: 21 dB (-2 dBm+)                                                                                                                                                                                                           |                                                                                                         |
| Firmware customization                | 5.8G Speed: 1201 Mbps (Max)                                                                                                                                                                                                           |                                                                                                         |
|                                       | 5.8G Power: 21 dB (-2 dBm+)                                                                                                                                                                                                           |                                                                                                         |
|                                       |                                                                                                                                                                                                                                       |                                                                                                         |
|                                       |                                                                                                                                                                                                                                       |                                                                                                         |
| WLAN Security Consultative            | Operating System: Linux operating system based on OpenWrt                                                                                                                                                                             |                                                                                                         |
|                                       | Supported languages: BusyBOS sheel,Lua,C,C++                                                                                                                                                                                          |                                                                                                         |
|                                       | Development tools: Provide SDK packages with built-in environments and contact us for custom development based on requirements documentation                                                                                          |                                                                                                         |
|                                       |                                                                                                                                                                                                                                       |                                                                                                         |
| System Services                       | OpenSystem, WPA-PSK, WPA2-PSK, WPAPSK/WPA2 PSK, WPA1 / WPA2                                                                                                                                                                           |                                                                                                         |
|                                       |                                                                                                                                                                                                                                       |                                                                                                         |
|                                       | 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 ,                                                                                                                                                                                      |                                                                                                         |
|                                       | MAC OS: 1 0.3.7 ; Browser :IE:6.0 Safari:1.2.4                                                                                                                                                                                        |                                                                                                         |
|                                       | Firefox:2.0.0.8                                                                                                                                                                                                                       |                                                                                                         |
|                                       |                                                                                                                                                                                                                                       |                                                                                                         |
| Device Management                     | 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)                                                                |

## Optional version configuration

| Version     | Mobile network | ports | WiFi  | Serial       | POE     |
|-------------|----------------|-------|-------|--------------|---------|
| HW5-5GMINI1 | 5G             | 2     | no    | RS232/R S485 | Support |
| HW5-5GMINI2 | 5G             | 2     | WiFi4 | RS232/R S485 | Support |
| HW5-5GPRO1  | 5G             | 4     | WiFi5 | RS232/R S485 | Support |
| HW5-5G1800  | 5G             | 5     | WiFi6 | RS232/R S485 | Support |
| HW5-4G310   | 4G             | 2     | no    | RS232/R S485 | Support |
| HW5-4G310W  | 4G             | 2     | WiFi4 | RS232/R S485 | Support |
| HW5-4G390W  | 4G             | 5     | WiFi4 | RS232/R S485 | Support |

## Optional frequency bands

|                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 4G band            | CN: FDD-LTE B1/3/5/8<br>TDD-LTE B38/39/40/41<br>EU: FDD-LTE B1/3/5/7/8/20<br>TDD-LTE B38/39/40/41<br>AU: FDD-LTE B1/3/5/7/8/20/28<br>TDD-LTE B38/40/41<br>NA: FDD-LTE B2/3/4/5/7/8/12/13/17/25/26/66<br>TDD-LTE B41<br>SA: FDD-LTE B2/4/5/7/8/28<br>TDD-LTE B40<br>J: FDD-LTE B1/3/8/18/19/26<br>TDD-LTE 41<br>GL: FDD-LTE B1/2/3/4/5/7/8/17/20/28<br>TDD-LTE B38/39/40/41                                                                                 |
| 5G band (Optional) | CN: 5G NR NSA: N41/78/79<br>5G NR SA: N1/8/28/41/78/79<br>LTE-FDD B1/3/5/8<br>LTE-TDD: B34/38/39/40/41<br>EA: 5G<br>SA&NSA: N1/3/5/7/8/20/28/38/40/41/71/77/78/79<br>LTE-FDD: B1/3/5/7/8/18/19/20/28/32<br>LTE-TDD: B34/38/39/40/41/42<br>GL5G NR SA:<br>n1/2/3/5/7/8/12/20/25/28/38/40/41/48/66/71/77/78/79<br>5G NR NSA: n38/41/77/78/79<br>LTE-FDD:<br>B1/2/3/4/5/7/8/12/13/14/17/18/19/20/25/26/28/29/30/32/66/71<br>LTE-TDD: B34/38/39/40/41/42/43/48 |

## Standard accessories



Power adapter \*1

Optional: British Standard /  
European Standard / American  
Standard



2 m suction cup antenna -  
WiFi



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



Certificate of conformity \*1

## ○ Shell positioning holes

