LINBLE
力必拓

Embedded 5G router module

LBT-T300-M400-E

Product specification

Product overview

The multi-functional 5G industrial router module is a module supporting 2-port Gigabit Ethernet, dual serial port D, and wide area network 5G wireless communication functions. The module firmware is loaded with wide area network communication, VPN tunnel and other functions, providing users with high-speed, safe and reliable mobile broadband services. The module supports 5G access of China Mobile, China Unicom, China Mobile and China Telecom.

The 5G industrial router module can fix the camera to transmit images through the 5G network.

Provide stable and reliable network channels for all kinds of devices that need to be connected to the Internet, and use Ethernet Network, RS232 port/RS485 port provide a variety of easy-to-use network access methods for customer applications, which simplifies the network development needs to the greatest extent.

Support WEB configuration mode, convenient and simple management, and support remote cloud control.

Field of applicat

Electricity

Petroleum

Coal mine

Finance

Communication

Public security

Heat

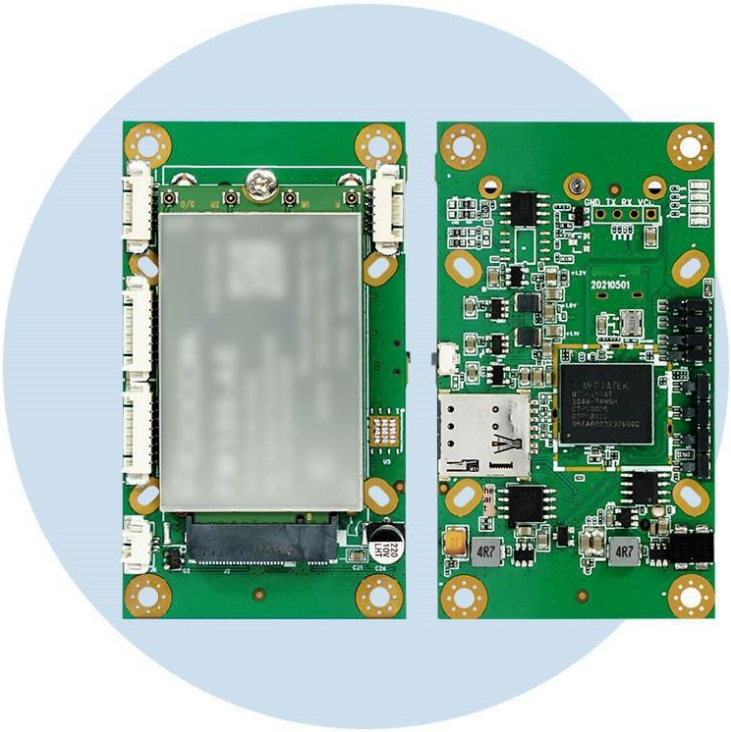
Industrial Control

Weather

Water Conservancy

Traffic

Municipal



Product characte

1, ultra-small size, length and width of only 74.09 X 41.92 X 9.45mm
2, support a variety of 5G wireless modules, basically plug and play
3, intelligent anti-drop, support online detection, drop automatic redial, to ensure that the device is always online

4. Support 5G backup network, seamlessly switch to 5G network when cable is disconnected, and automatically detect cable recovery

5. Cloud remote background management, remote upgrade and remote configuration

6. Support serial port data serial port TCP/UDP transparent data transmission or AT command transmission

7. Support VPN security tunnel function, including PPTP and L2TP

8. Complete and robust router functions, supporting multiple Internet access modes: automatic IP allocation, designated IP, PPPoE

9. Support IPTABLES firewall and various network protocols

10. Support dynamic DDNS: support Peanut Shell, 88IP and dyndns domain name service providers

11. Support serial port local TFTP and web software upgrade

Functional overview

Software function

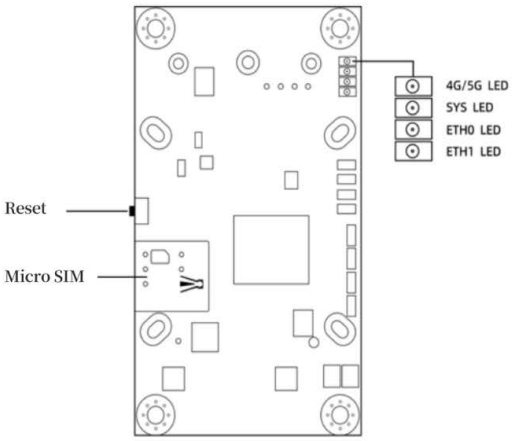
The way to surf the Internet	4/5G dial-up DHCP/Static IP/PPPoE
Number of users supported	Wired: 253
Operating system requirements	Windows XP/VISTA Linux 2.6 Windows 7 and above MAC OS: 10.3.7 and above
Browser requirements	IE: 6.0 and above Safari: 1.2.4 and above Firefox: 2.0.0.8 and above
Security management	Set up a firewall to prevent malicious attacks from the Internet on computers in the LAN. MAC filtering: prohibit MAC addresses that have been added. Access control: Control the access of computers in the LAN to the Internet. Port blocking: Block certain viruses from continuously initiating connections through a certain port to prevent Dos attacks
System Services	Virtual server: Set an internal server for Internet users to access DMZ: When the open port of the virtual server to be set is uncertain, it can be set as a DMZ host Port triggering: The wireless router can automatically open the inward service port according to the port of the LAN accessing the Internet. Serial port service: realize serial port data transmission, AT command control and other functions.
Equipment management	Locale NTP server settings Back up system setup information Recover Settings Information from File the password and restore to the factory settings Software upgrade Remote management Restart Change
Data security	PPTP Client L2TP Client

Hardware parameters

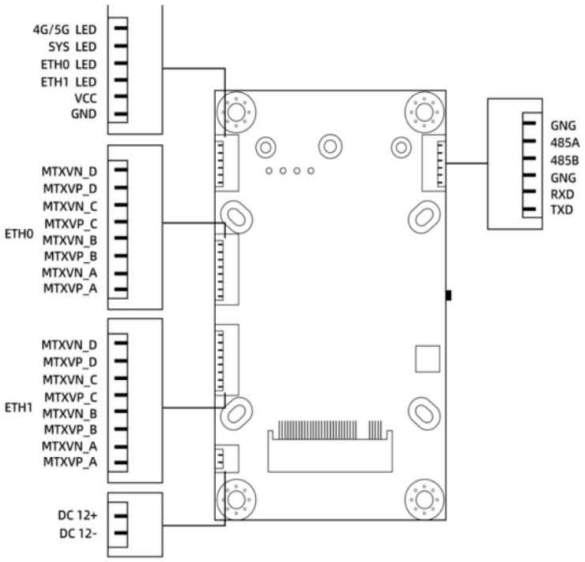
Antenna	IPEX4 generation bus
External interface	LAN port: 2 (LAN1 is Antenna interface: 4 WAN/LAN adaptive) Indicator light: 4 RS232/485 interface: 2 Terminal power supply interface: 1 SIM card slot: 1 Reset key: 1
Frequency band supported (optional)	GN (Domestic-Qualcomm): Asia, Europe and Australia: 5G Sub-6: n1, n28, n41, n77, n78, n79 LTE FDD: B1, B2, B3, B5, B7, B8, LTE TDD: B34, B39, B40, B41 n1/3/5/8/20/28 /38/41/77/78 / 79 GN (Domestic-Zhanrui) 5G Sub-6: n1, n28, n41, n78, n79 LTE FDD: B1, B2, B3, B5, B7, B8, B1/3/5/7/8/19/ 20/28 LTE TDD: B34, B38,B39, B40, B41 B38/40/41/42 / 43
Main frequency of storage memory	Store 16 MB Main frequency: 880MHz Memory 128MB [on chip]
Overall dimensions	Length, width and height: 74.09 x41.92 x9.45 mm (fixed hole installation)
Power source	DC supply: 12 V/2A
Power consumption (current)	Less than 400mA
Work environment	Operating temperature: -30℃~+70℃ Storage temperature: -40℃~+85℃ Humidity:5%~95%, non-condensing

Interface description

Side A



Side B



A: Connector J14

Pin No	Signal name	Signal function
1	4G/5G	4G/5G status indication
2	SYS	Equipment operation status indication
3	ETH0	Network connection port
4	ETH1	Network connection port
5	VCC	Power supply positive pole
6	GND	Negative pole of power supply

B: Connector J3 data serial port [232/485]

Pin No	Signal name	Signal function
1	GND	Grounding
2	RS485A	Differential signal RS485A
3	RS485B	Differential signal RS485B
4	GND	Grounding
5	RS232-RXD	Serial port
6	RS232-TXD	Serial port output

C: Connector J7 Ethernet connection WAN/LAN

Pin No	Signal name	Signal function
1	MTXVN_D	Ethernet differential line-
2	MTXVP_D	Ethernet differential line+
3	MTXVN_C	Ethernet differential line-
4	MTXVP_C	Ethernet differential line+
5	MTXVN_B	Ethernet differential line-
6	MTXVP_B	Ethernet differential line+
7	MTXVN_A	Ethernet differential line-
8	MTXVP_A	Ethernet differential line+

D: Connector J5 Ethernet connection LAN

Pin No	Signal name	Signal function
1	MTXVN_D	Ethernet differential line-
2	MTXVP_D	Ethernet differential line+
3	MTXVN_C	Ethernet differential line-
4	MTXVP_C	Ethernet differential line+
5	MTXVN_B	Ethernet differential line-
6	MTXVP_B	Ethernet differential line+
7	MTXVN_A	Ethernet differential line-
8	MTXVP_A	Ethernet differential line+

E: Connector J6 power input

Pin No	Signal name	Signal function
1	VCC	DC6-12V +
2	GND	DC6-12V -

F: Connector J1Debug serial port

Pin No	Signal name	Signal function
1	VCC	Power Supply
2	RXD0	Receive TTL
3	TXD0	Send TTL
4	GND	Grounding

Schematic diagram of shell locating holes