

R700 Technical Datasheet



R700 adopts the high performance professional router chipset and 4G wireless module. It is based on embedded real-time operating system as software support platform, meanwhile provides a console port (DTU), an Ethernet WAN port and a LAN port. It can connect serial devices、 Ethernet devices and WiFi devices at the same time. It has accomplished wireless communication、 WiFi function and Ethernet router function, with transparent data transmission.

The application fields of R700 cover every IoT industry field in each aspect, Such as: Smart Home、 Finance 、 Transport 、 Security 、 Environmental protection、 Military、 Agriculture、 Forestry、 Water、 Coal Mine and Petrochemical and so on.

Product Feature

Application design
Adopts high performance wireless module
Using high performance professional routing communication processor
Adopts metal mould, enhance the structure protection. The metal shell is isolated securely to the system.
Wide power input (DC 5-24V)
Stable and reliable
Ethernet interface built-in 2KV electromagnetic isolation protection
SIM Card ESD protection design
The Console and Reset、 WPS button ESD protection design
Power supply built-in fuse protection circuit
Antenna interface lightning protection
Standard and easy-using
Provides standard Ethernet port and WiFi access, is able to directly connect the serial devices、 Ethernet devices and WiFi devices.
Provides standard cable WAN (supports PPPOE protocol), is able to directly connect ADSL equipment.
Intelligent data terminal, can enter the data transmission state once power on
Provides powerful central management software in order to manage the devices conveniently
Easy and flexible to use, several work modes for selection
Convenient and practical WEB design, is easy for operate system configuration

Powerful function

Supports multiple WAN connection mode, including static IP, DHCP, L2TP, PPTP, PPPOE, 3G/LTE
Supports VPN client (PPTP, L2TP, VPN, IPSEC & GRE)
Supports VPN sever (PPTP, L2TP, VPN, IPSEC & GRE)
Supports remote management, SYSLOG, SNMP, TELNET, SSHD, HTTPS and so on
Supports local and remote online update, import and export configuration file
Can clone VLAN, MAC address, PPPoE server
Supports WiFi 802.11b/g/n, WiFi AP and AP client
Supports WiFi encryption methods like WEP, WPA, WPA2 and so on , supports RADIUS authentication, MAC address fi3Gring functions
Supports APN/VPDN
DHCP server and DHCP client, DHCP binding MAC address, DDNS, firewall and NAT DMZ host, QoS, traffic statistics, real-time display data transmission rate functions and so on
Supports TCP/IP, UDP, FTP, HTTP network protocol
Support SPI firewall, VPN through, access control, URL fi3Gring

Product Specification

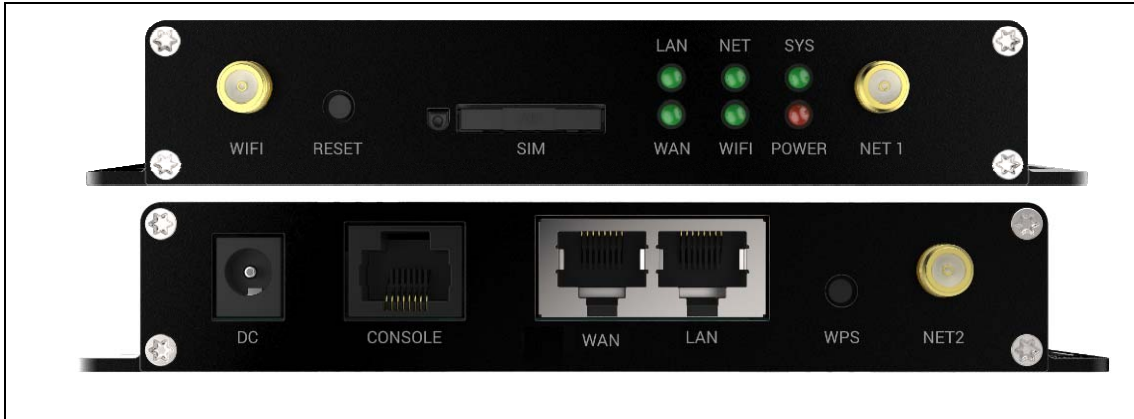
LTE parameters	
Item	Content
Wireless module	4G wireless module
Standard and Frenquency	<p>A Version: FDD-LTE B2/4/5/17; Tri-B UMTS/HSDPA/HSPA+ B2/5/AWS</p> <p>E Version: FDD-LTE B1/3/7/8/20 TDD-LTE B38/40 UMTS B1/8 GSM 900/1800</p> <p>C Version: TDD-LTE B28/39/40/41 FDD-LTE B1/3/7/8 TD-SCDMA B34/39 UMTS B1/8 GSM 900/1800MHz</p> <p>J Version: TDD-LTE B41 FDD-LTE B1/3/8/18 UMTS B1/6/8</p>
Tx Power	<p>GSM/GPRS:</p> <ul style="list-style-type: none"> ● Class 4 (2W): GSM850、EGSM900 ● Class 1 (1W): DCS1800、PCS1900 <p>EDGE:</p> <ul style="list-style-type: none"> ● Class E2 (0.5W): GSM850、EGSM900 ● Class E1 (0.4W): DCS1800、PCS1900 <p>UMTS:</p> <ul style="list-style-type: none"> ● Class 3 (0.25W): WCDMA, Class 2 (0.25W):TD-SCDMALTE:

	<p>LTE</p> <ul style="list-style-type: none"> ● Class 3 (0.25W): LTE
Rx Sensitivity	<ul style="list-style-type: none"> ● GPRS multi-slot class 12 ● EDGE multi-slot class 12 ● UMTS R99 speed: 384 kbps DL/UL ● HSPA+: 5.76 Mbps(UL), 42 Mbps(DL) ● TD-HSDPA/HSUPA: 2.2 Mbps(UL), 2.8 Mbps(DL) ● LTE Category 3 - 100 Mbps (DL) ● LTE Category 3 - 50 Mbps (UL)

WIFI parameters	
Item	Content
Standard	IEEE802.11b/g/n Standards
Theoretical Bandwidth	IEEE802.11b/g: upto 54Mbps IEEE802.11n: upto 150Mbps
Security Encryption	Support WEP、WPA、WPA2 encryption ways, WPS is optional
Tx Power	14 dBm (11g), 17 dBm (11b), 14dBm (11n)
Rx Sensitivity	<-70 dBm@54Mbps

Hardware System	
Item	Content
CPU	Professional Routing Processor
FLASH	8MB
DDR2	64MB

Interface	
Item	Content
WAN	One 10/100M Ethernet ports (RJ45 socket), adaptive MDI/MDIX, built-in 2KV electromagnetic isolation protection
LAN	One 10/100M Ethernet ports (RJ45 socket), adaptive MDI/MDIX, built-in 2KV electromagnetic isolation protection
RS232 Port(RJ45)	Be used as DTU, is available to connect serial devices
Indicator	“Power”、“System”、“Net”、“WIFI”、“WAN”、“LAN”
Antenna Interface	4G: standard SMA female Antenna interface, the characteristic impedance 50Ω WIFI: standard SMA male Antenna interface, the characteristic impedance 50Ω
SIM/UIM	Standard draw card interface, support 1.8V/3V SIM/UIM card, built-in ESD protection
Power	Standard 3 core power socket , including built-in fuse protection device
Reset	With this button, the parameters of the ROUTER configuration can be restored to the factory
WPS Button	One key to encrypt the Router



Power supply

Item	Content
Standard Power	DC 6V/2A
Power Range	DC 5V~24V
Working current	2A (max)

Physical Feature

Item	Content
Case	Aluminum Alloy Shell
Size	134mm*90mm*20mm
Weight	300g

Others

Item	Content
Operating Temperature	-10~+60°C
Storage Temperature	-30~+85°C
Relative Humidity	95%(No condensation)