

Introduction

H20 4G 5G Redcap Router is a kind of internet of things wireless communication router, uses Sub6 / LTE mobile cellular network, to provide convenient and high speed network transmission function.

This series of product uses high performance MIPS industrial communication processor, flush bonding real-time operation system as software supporting platform. It provides secure, high speed, stable 4G wireless network, and provides 2 LAN, RS-485/232 and Wi-Fi.

It can be used in finance, postal, smart power grids, smart transportation, environment monitor, fire protection monitor, security, water conservancy, public safety, advertising release, industrial control, earth quake monitor, meteorological watch, instrument monitor etc.



Features

Industrial design

- Use high performance industrial wireless module
- Use high performance MIPS industrial communication processor
- Support low power consumption, including sleep mode, timing on/off line mode and timing switch on/off mode
- Use plate metal CRS shell, heat dissipation is good
- Power source: 7.5V~32V DC(extended to be 36V)
- Degree of protection: IP34(Max IP51)

Network characteristic

- Port flow detection and link real time monitoring
- Various VPN protocols (PPTP, L2TP, IPSec, OpenVPN, GRE, Wireguard, Zerotier etc.)
- Serial port DTU function supporting
- Support dial as required (audio, SMS, or data trigger)
- Support UPnP, Firewall, Port forwarding, IP passthrough and Hotspot(Wi-Fi Portal) etc.

Stability

- Use soft hardware watchdog and multi-level link detection , with capability of fault automatic diagnosis, automatic recovery, ensure equipment to work in stable and safe way
- Multiple equipment self-checking mechanism
- ESD protection for each port, prevent static shock
- Wireless network signal indicator light, 3 levels to show the signal strength on-site

Remote management

- Remote parameter configuration
- Remote parameter backups
- Remote restart and log query
- Remote equipment upgrade
- Equipment online monitoring

Functions

- Down compatible LTE, WCDMA, HSPA, GPRS, EDGE
 - Support 2 x LAN (10/100M) or 1 x LAN + 1 x WAN
 - Provide standard RS232/485 interface, support serial DTU(data transmission unit) function
 - Support 2.4G WIFI, IEEE802.11b/g/n
 - Support wired and wireless network mutual backups
 - Support hardware WDT, provide anti-log off mechanism, ensure data terminal online forever
 - Support DHCP, DDNS, firewall, NAT, and DMZ host etc.
 - Support ICMP, TCP, UDP, Telnet, SSH, API, FTP, HTTP, HTTPS protocols etc.
 - Support Industrial SIM/UIM card design
 - Support base station and Wi-Fi hybrid positioning
- ### Advanced
- Support WAN, wire and wireless backup(optional)
 - Support dual sim(optional)
 - Support GPS / Beidou orientation(optional)

Specification

Hardware		Software	
CPU	MIPS core (580MHz)	Network protocols	PPPoE, TCP, UDP, DHCP, NAT, DNS, NTP, SMTP, Telnet, VLAN, SSH2, DDNS, etc.
RAM	512Mb DDR2	VPN tunnels	IPsec, OpenVPN, GRE, WireGuard, Zerotier
Flash	128Mb	Firewalls	DMZ, NAT, Filtering (IP/Domain name/MAC address), QoS
Cellular Interface		Remote management	Web, CLI, SMS
Number of antennas	2(Main, Aux)	Serial port protocols	Transparent, TCP Client/Server, UDP, Modbus RTU Gateway
Connector	SMA-K	Device Management	
SIM	1 x SIM/UIIM	Basic	Local or remote web browser(IE v8 or above) VLAN SNMP v2, v2c, v3
Ethernet Port		Optional	M2M management platform CLI/Telnet command SSH configure MQTT TR069
Number of ports	2(2 x LAN or 1 x WAN+1 x LAN) IEEE 802.3, IEEE 802.3u		
Serial Port			
Number of ports	1 x RS-232 or 1 x RS-485		
Connector	RJ45 to DB9		
Wi-Fi Interface		Physical Characteristics	
Number of antennas	1(Wi-Fi)	Ingress protection	IP34
Connector	RP-SMA-K	Housing & Weight	Metal, 230 g
Standards	IEEE802.11 b/g/n	Dimensions	102 x 73.5 x 24.5 mm
Frequency bands	2.4 GHz	Operating temperature	-30 ~ +75 °C
Bandwidth	Standard 150Mbps, 300Mbps optional	Storage temperature	-40 ~ +85 °C
Security	WEP, WPA, WPA2 encryption	Relative humidity	5 ~ 95% RH (non-condensing)
Power supply and consumption		Regulatory and Type Approvals	
Connector	5.5x2.1mm DC	Standard	EN 300 328 v 1.7.1(2016-11)
Input voltage	7.5 ~ 32 V DC		EN 301 489-1
Power consumption	Idle: 170mA@12 V Max: 300mA@12 V		EN 301 908-1
Recommended power supply	12V DC/1.5 A power adapter		EN 55024:2015
			EN 55032:2015
			EN 61000-3-3:2008
			EN 301 489-17
			EN 301 489-52
			EN 301 908-2/13
			EN 60950-1
			EN 61000-3-2
			EN 62311:2008
Others		Certificates	
Reset button	1 x RST	Passed	CE
LED indicators	1 x WLAN, 1 x WAN, 1 x LAN, 1 x NET		RoHS
Watchdog	Built-in		CCC
Guarantee	One year		
Customization	Support		

Application

ATM & Retail

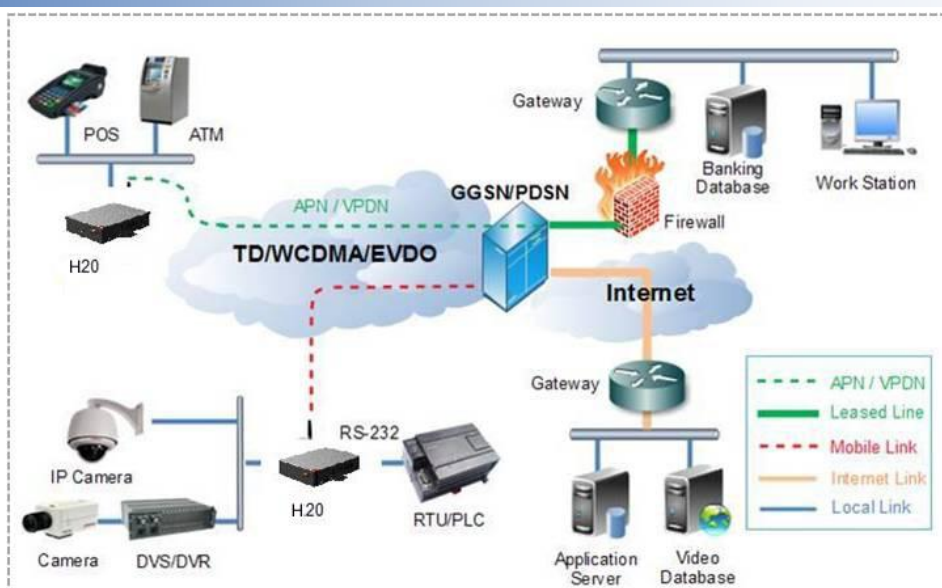
Transportation & Logistics

Energy & Utilities

Oil, Gas & Mining

Industrial IoT

Enterprise IT



Order Information

Model	Frequency Bands	Country/ Region	Interface	Wi-Fi	GPS	Package Contains
H20-FALT	4G: FDD-LTE: Band1/3/5/7/8/20/28 TDD-LTE: Band38/39/40/41 3G: WCDMA/HSDPA/HSUPA/HSPA+: Band1/2/5/8	Global	2 x LAN	×	×	1 x H20 router 1 x Cellular antennas 1 x Wi-Fi antennas(optional) 1 x GPS antenna(optional) 1 x RJ45 cable 1 x 12V/1.5A Power supply
H20-FALT-W			2 x LAN	√	×	
H20-FALT-G			2 x LAN	×	√	
H20-FALT-WG			2 x LAN	√	√	
H20-FA2T			1 x LAN + 1 x WAN 1 x RS-232	×	×	
H20-FA2T-W			1 x LAN + 1 x WAN 1 x RS-232	√	×	
H20-FA2T-G			1 x LAN + 1 x WAN 1 x RS-232	×	√	
H20-FA2T-WG			1 x LAN + 1 x WAN 1 x RS-232	√	√	
H20-FA4T			1 x LAN + 1 x WAN 1 x RS-485	×	×	
H20-FA4T-W			1 x LAN + 1 x WAN 1 x RS-485	√	×	
H20-FA4T-G			1 x LAN + 1 x WAN 1 x RS-485	×	√	
H20-FA4T-WG			1 x LAN + 1 x WAN 1 x RS-485	√	√	
H20-WALT			2 x LAN	×	×	
H20-WALT-W			2 x LAN	√	×	
H20-WALT-G			2 x LAN	×	√	
H20-WALT-WG			2 x LAN	√	√	
H20-WA2T			1 x LAN + 1 x WAN 1 x RS-232	×	×	
H20-WA2T-W			1 x LAN + 1 x WAN 1 x RS-232	√	×	
H20-WA2T-G			1 x LAN + 1 x WAN 1 x RS-232	×	√	
H20-WA2T-WG			1 x LAN + 1 x WAN 1 x RS-232	√	√	
H20-WA4T			1 x LAN + 1 x WAN 1 x RS-485	×	×	
H20-WA4T-W			1 x LAN + 1 x WAN 1 x RS-485	√	×	
H20-WA4T-G			1 x LAN + 1 x WAN 1 x RS-485	×	√	
H20-WA4T-WG			1 x LAN + 1 x WAN 1 x RS-485	√	√	

**For more information about frequency bands in different countries, please contact your Homtecs sales representative.*