

RTDI-5130-W

5G INDUSTRIAL ROUTER



VARIOUS VPN
PROTOCOLS

SA/NSA
NETWORK

MULTI-
INTERFACES

COMPACT SIZE

INDUSTRIAL
GRADE DESIGN

HIGH COST
EFFECTIVE

Introduction

RTDI-5130-W is a wireless router for the Internet of Things, which uses public 3G/4G/5G networks to provide users with wireless long-distance big data transmission functions. Provide 1xRS232,1xRS485,1xLAN and 1xWAN/LAN port to achieve transparent data transmission and routing function. The product has been widely used in the M2M industry in the IoT industry chain, such as smart grid, smart transportation, smart home, supply chain automation, industrial automation, and other fields.

Industrial-grade Design

- High-performance industrial-grade wireless module
- High-performance industrial-grade 32-bit communication processor
- Using metal shell, protection grade IP30
- Wide power input range 9~36V

Stability & Reliability

- WDT Watchdog design
- Anti-dropping mechanism to ensure that the data terminal is always online
- Built-in 1.5KV electromagnetic isolation protection for Ethernet interface
- RS232/RS485 interface, power and data isolation with CSA, UL and IEC standards
- SIM/UIM card interface built-in 15KV ESD protection
- Built-in reverse phase protection and over voltage protection for power interface

Standard & Convenience

- Standard RS232, RS485, and Ethernet port
- Provide standard wired WAN port (Support standard PPPOE protocol)
- Plug and Play
- Multiple working mode options
- Configuration and maintenance interface
- Support DIN rail and wall-mounting installation
- Support local and remote WEB mode or CLI mode

High performance

- Multiple WAN connection methods, include Static IP/DHCP/PPPOE/DHCP-4G/5G
- Support 3G/4G/5G and wired WAN dual link backup
- Support VPN Client: PPTP/L2TP/IPSEC
- Support VPN Server: PPTP/L2TP/IPSEC
- Remote management SYSLOG/SNMP/TELNET/SSH/HTTPS
- Support local upgrade and remote upgrade
- Import and export configuration files
- Support NTP / Build-in RTC
- Support DDNS
- Support VLAN, MAC address clone and PPPoE server
- WIFI Support 802.11b/g/n/ac. Support AP/AP Client/Bridge mode
- WIFI Support WEP, WPA, WPA2 and other encryption methods
- Support Private APN SIM card
- Support APN/VPDN
- Support DHCP server and DHCP client, NAT, DMZ, QOS
- Support TCP/IP, UDP, FTP (Optional), HTTP and other network protocols
- Support SPI firewall, VPN pass through, ACL, URL filter
- Supports 5G NSA and SA network

Specifications

Cellular Specification	
Module	Industrial grade wireless module
Frequency	5G NR: n1/n3/n5/n7/n8/n20/n28/n38/n40/n41/n66/n75/n76/n77/n78 LTE: B1/B2/B3/B4(66)/B5(18/19/26)/B7/B8/B12(17)/B13/B14/B20/B25/ B26/B28/B29/B30/B38/B39/B40/B41/B42/B43/ B46/ B48/B71 Remarks: Different modules support different network standards
Bandwidth	5G NR: DL 3.4 Gbps, UL 350 Mbps LTE Cat20: DL 2.0 Gbps, UL 150 Mbps HSPA+: DL 42 Mbps, UL 5.76 Mbps
Power Sensitivity	<23dBm <-97dBm

Band	Duplex	SCS (KHz)	Power Class (PC)	Bandwidths
n1	FDD	15	3	5, 10, 15, 20, 25, 30, 40
n3	FDD	15	3	5, 10, 15, 20, 25, 30, 40
n5	FDD	15	3	5, 10, 15, 20
n7	FDD	15	3	5, 10, 15, 20, 25, 30, 40
n8	FDD	15	3	5, 10, 15, 20
n20	FDD	15	3	5, 10, 15, 20
n28	FDD	15	3	5, 10, 15, 20, 30
n38	TDD	30	3	10, 15, 20, 30, 40
n40	TDD	30	3	10, 15, 20, 30, 40, 50, 60, 80, 100
n41	TDD	30	2	20, 30, 40, 50, 60, 70, 80, 90, 100
n66	FDD	15	3	5, 10, 15, 20, 30, 40
n75	SDL	15	N/A	5, 10, 15, 20, 25, 30
n76	SDL	15	N/A	5
n77	TDD	30	2	10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100
n78	TDD	30	2	10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100



WIFI Specification	
Frequency	IEEE802.11b/g/n, 2.4G, Support AP mode IEEE802.11ac, 5.8G, Support AP mode
Bandwidth	IEEE802.11b/g: 54Mbps IEEE802.11n: 150Mbps IEEE802.11ac: 433Mbps
Security	WEP, WPA, WPA2, WPS (Optional)
Power	26dBm (11b), 21dBm (11ac/MCS7/HT40), 20dBm (11ac/MCS9/HT80)
Sensitive	< -72dBm @ 54Mbps
Hardware System	
CPU	Industrial-grade 32-bit communication processor
Flash	32MB
DDR3	512MB
Power Supply	
Standard	DC 12V/1.5A
Range	DC 9 ~ 36V
Consumption	<1.2A (12V)
Physical Properties	
Shell	Metal shell, protection grade IP30
Size	106 x 76 x 23.5 mm
Weight	285g
Others	
Operating Temperature	-35 ~ +75 °C (-31 ~ +167 °F)
Storage Temperature	-40 ~ +80 °C (-40 ~ +185 °F)
Relative Humidity	95% (No condensation)
Specific Absorption Rate (SAR)	Compliant to EN 62311 standard
QAM	Support 64QAM uplink and 256 QAM downlink modulation
MIMO	yes
3GPP	Compliant with 3GPP Release 15

Interfaces	
WAN	<p>1 x 10/100/1000M Ethernet (RJ45), Auto MDI/MDIX</p> <p>Built-in 1.5KV electromagnetic isolation protection</p> <p>Remarks: Can be used as LAN port</p>
LAN	<p>1*10/100/1000M Ethernet (RJ45), Auto MDI/MDIX,</p> <p>Built-in 1.5KV electromagnetic isolation protection</p>
Serial	<p>1 x RS232/RS485, Built-in 1.5KV electromagnetic isolation protection</p> <p>Data bit: 5, 6, 7, 8</p> <p>Stop bit: 1, 1.5 (Optional), 2</p> <p>Check: NONE, EVEN, ODD, SPACE (Optional), Mark (Optional)</p> <p>Baud rate: 2400~115200bits/s</p>
Indicators	"WIFI", "Online", "PWR", "SYS"
Antenna	<p>Cellular: 4 standard SMA female antenna interfaces, characteristic impedance 50 ohms</p> <p>WIFI: 1 standard SMA male antenna interfaces, characteristic impedance 50 ohms</p>
SIM/UIM	<p>Standard drawer type user card interface, support 1.8V/3V SIM/UIM card,</p> <p>built-in 15KV ESD protection</p> <p>Support Micro-SIM*2 card and eSIM</p>
Power	Terminal power socket
Reset Button	Through this button, the parameter configuration can be restored to the factory

Dimensions



Topology



Ordering Informations

Reference	Description
RTDI-5130-W	Routeur 5G/4G NR / FDD LTE / TDD LTE / WCDMA, Temp -35°C à +75°C, 1 LAN + 1 WAN/LAN Eth 1G, Two SIM and eSIM, Wifi b/g/n/ac. IP30. IPv4/v6, VPN, Power supply 9 to 36VDC. Removables Antennas. 1 com RS232 + 1 COM RS485. Leds indicators. Power consumption 14Watts.



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