

R2000 Ent robustos

Industrial Dual Module Cellular VPN Router with Voice 5 Eth + 1 Voice/RS-232/RS-485 + 1 USB Host



INTRODUTION

The Robustel Industrial Dual Module Cellular VPN Router with Voice (R2000 Ent) provides fast and reliable Internet connectivity, enhanced voice capabilities - making it perfect to respond to and manage any device, anytime and anywhere.

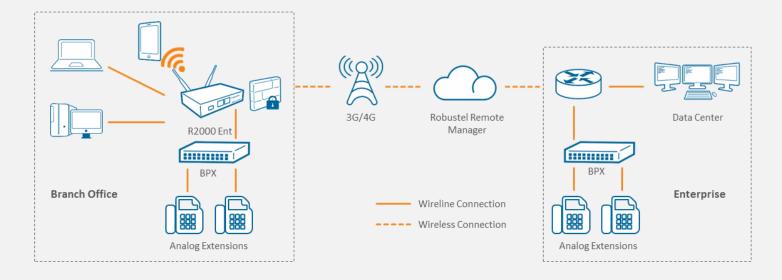
R2000 Ent is a powerful router developed from RobustOS, a Robustel self-developed and Linux-based operating system which is designed to be used in Robustel hardware routers. The RobustOS includes basic networking features and protocols providing customers with a very good user experience. Meanwhile, Robustel offers a Software Development Kit (SDK) for partners and customers to allow additional customization by using C, Python or Java. It also provides rich APPs to meet fragmented IoT market demands.

Robustel is a leading global industrial IoT/M2M hardware and solution provider. Since its establishment in 2010 in Guangzhou, China, Robustel has been focusing on designing and manufacturing industrial cellular routers, gateways, modems, cloud platforms and E2E solutions. In order to support global business in more than 100+ countries and regions, Robustel has set up local offices in Germany, Australia, Netherlands, Japan and Hong Kong.

KEY FEATURES

- Voice call/RS-232/RS-485 (choose one only) shared across an RJ11 port
- Voice call and data transmission being used simultaneously, depending upon your ISP network
- Embedded dual-module supporting two SIM cards online simultaneously
- > The feature Link Manager supporting configuration of Cellular WAN, Ethernet WAN, WiFi link backup and ICMP detection
- WAN port supporting PD feature compatible with 802.3at.
- RobustOS + SDK + App
- IPsec/OpenVPN/GRE/L2TP/PPTP/DMVPN
- Management and maintenance via Web/CLI/SMS SNMP/RobustLink Cloud
- Robust industrial design (9 to 36V DC, desktop or wall mounting or DIN rail mounting)

APPLICATION FXAMPLES



SPECIFICATIONS

Cellular Interface

Number of ports 4 (MAIN1 + AUX1 + MAIN2 + AUX2)

Connector SMA, female SIM 2 (3 V & 1.8 V)

Standards GSM/GPRS/EDGE/WCDMA/HSDPA/HSUPA/

HSPA+/DC-HSPA+/TD-SCDMA/CDMA (CDMA

1X/EVDO)/FDD LTE/TDD LTE

Ethernet Interface

Number of ports 4 x LAN + 1 x WAN (10/100 Mbps)

WAN port Supports 802.3 at PD feature (optional)

Magnet isolation 4 KV

protection

WiFi Interface

Number of ports 2 (WiFi1 + WiFi2) Connector RP-SMA, male

Standards 802.11b/g/n, supporting AP and Client mode

Frequency bands 2.412 - 2.484 GHz (2.4 GHz ISM band)

Security WEP, WPA, WPA2
Encryption 64/128 AES, TKIP

Data speed 2*2 MIMO, up to 300 Mbps

Voice Interface

Number of ports 1 x Voice call

Connector RJ11

Standards ITU Q.512 (SLIC)

ITU K.20 (overcurrent and overvoltage

protection)

Subscriber line interface

circuit (SLIC)

Ring voltage: 40 to 90 Vpk configurable

Ring frequency: 20 to 25 Hz Ring waveform: sine wave

Maximum ringer load: 5 ringer equivalence

numbers (RENs)

On-hook voltage (tip/ring): -46 to -56V Off-hook current: 18 to 20 mA Terminating impedance: configurable

Serial Interface

Serial port 1 x RS-232/RS-485 with an RJ11 interface
USB host 1 x 480 USB 2.0 port up to 480 Mbps

Others

Reset button 1 x RST

LED indicators 1 x RUN, 1 x NET1, 1 x NET2, 1 x RSSI1, 1 x RSSI2,

1 x USR

5 x LINK of Ethernet interface, including WAN,

ETH1, ETH2, ETH3 and ETH4

Software (Basic features of RobustOS)

Network protocols PPP, PPPoE, TCP, UDP, DHCP, ICMP, NAT, HTTP,

HTTPs, DNS, ARP, RIP, OSPF, NTP, SMTP, Telnet,

VLAN, SSH2, etc.

VPN tunnel IPsec, OpenVPN, GRE

Firewall DMZ, anti-DoS, Filtering (IP/Domain name/MAC

address), Port Mapping, Access Control

Management Web, CLI, SMS

Serial port Transparent, TCP Client/Server, UDP,

Modbus RTU Gateway

App Center (Available apps for RobustOS)

Apps L2TP, PPTP, DMVPN, RobustVPN, DDNS, VRRP,

QoS, Captive Portal, WLAN Multi AP, SNMP,

Language, RobustLink

*Request on demand. For more APPs please visit www.robustel.com.

Power Supply and Consumption

Connector 2.1 mm DC Jack socket

Input voltage 9 to 36V DC

Power consumption Idle: 350 mA@12 V

Data link: 500 mA (peak) @12 V

PD feature WAN port support

Input voltage 48 to 57V DC

Physical Characteristics

Ingress protection IP30

Housing & Weight Metal, 750 g

Dimensions 193 x 113 x 32 mm

Installations Desktop or wall mounting or DIN rail mounting

ORDERING INFORMATION

Model	R2000-E4L1	R2000-E4L2
Module Number	Single module (Mini PCIe)	Dual module (Mini PCIe)
Antenna Number	2	4
Air Interface	GSM/GPRS/EDGE/WCDMA/HSDPA/HSUPA/HSPA+/DC-HSPA+/TD-SCDMA/CDMA (CDMA 1X/EVDO)/	
	FDD LTE/TDD LTE	
Frequency Bands	AU: B1/B3/B5/B7/B8/B28, B40	JP: B1/B3/B8/B9/B18/B19/B21/B28, B41
4G	EU: B1/B3/B7/B8/B20/B28/B31, B38/B40	CN: B1/B3, B38/B39/B40/B41
	US: B2/B4/B5/B13/B17/B25, B41	
3G	WCDMA/HSDPA/HSPA+/DC-HSPA+: B1/B2/B5/B6/B8/B9/B19	
	TD-SCDMA: B34/B39	
	CDMA (CDMA 1X/EVDO): R0/A BC0/BC1/BC10	
2G	850/900/1800/1900 MHz	
Operating Environment	-25 to 70°C/5 to 95% RH	

^{*}For more information about 4G frequency bands in different countries, please contact your Robustel sales representative.

