

# GoRugged R2000

## Industrial Dual SIM Cellular VPN Router

For GSM/GPRS/EDGE/UMTS/TD-SCDMA/CDMA/WCDMA/HSPA+/E-UTRA/LTE Networks

Robustel GoRugged R2000 is a rugged cellular router offering state-of-the-art mobile connectivity for machine to machine (M2M) applications.

### Key Features

- Dual SIM redundancy for continuous cellular connections; supports 2G/3G/4G
- WAN – Static/PPPoE/DHCP Client
- Multiple links backup and ICMP detection
- VPN tunnel - IPsec/OpenVPN/GRE
- Advanced firewall: filtering, port mapping, DMZ
- Supports DDNS
- Supports VRRP
- Supports SNMP report events which include system startup, system reboot, system time update etc.
- WAN port supporting PD feature - compatible with 802.3at. (optional)
- The metal enclosure can be mounted on a DIN rail, on the wall or be put on desktop
- Management and upgrading via web user interface/SMS/CLI
- Auto reboot via SMS/Timing
- Includes built-in Watchdog/Timer



### Typical Applications

- ATM/Vending Machine/Retail POS/Kiosks
- Branch Offices
- Convenience Stores
- Quick Service Restaurants
- Digital Signage
- IP Video Surveillance

### Ordering Information

Model No.	Frequency Bands	Operating Environment
R2000-3P	HSDPA/HSUPA/HSPA+: 800/850/900/AWS/1800/1900/2100 MHz WCDMA: 900/2100 MHz CDMA (CDMA1X/EVDO): BC0 TD-SCDMA: 1900/2100 MHz UMTS: 800/850/900/1800/1900/2100 MHz GSM/GPRS/EDGE: 850/900/1800/1900 MHz	-20 to 65°C/5 to 95% RH
R2000-4L	FDD LTE: B1, B2, B3, B4, B5, B7, B8, B18, B19, B20, B21, B28, B31 TDD LTE: B38, B39, B40, B41 3GPP E-UTRA Release 11 HSDPA/HSUPA/HSPA+: 850/900/1900/2100 MHz WCDMA: 850/900/2100 MHz CDMA (CDMA1X/EVDO): BC0 TD-SCDMA: 1900/2100 MHz UMTS: 800/850/900/1800/2100 MHz GSM/GPRS/EDGE: 850/900/1800/1900 MHz	-20 to 65°C/5 to 95% RH

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### Specifications

#### Cellular Interface

- Standards: GSM/GPRS/EDGE/UMTS/TD-SCDMA/CDMA/WCDMA/HSPA+/E-UTRA/LTE
- GSM: max DL/UL = 9.6/2.7 Kbps
- GPRS: max DL/UL = 86 Kbps
- EDGE: max DL/UL = 236.8 Kbps
- UMTS: max DL/UL = 384 Kbps
- TD-SCDMA: max DL/UL = 2.8 Mbps/384 Kbps
- CDMA: max DL/UL = 3.1 Mbps/1.8 Mbps
- WCDMA: max DL/UL = 14.4 Mbps/384 Kbps
- HSPA+: max DL/UL = 21.6/5.76 Mbps, fallback to 2G
- TDD LTE: max DL/UL = 112/10 Mbps, fallback to 2G/3G
- FDD LTE: max DL/UL = 150/50 Mbps, fallback to 2G/3G
- SIM: 2 x (3 V & 1.8 V)
- Connector: SMA, male (1 x MAIN + 1 x AUX)

#### Ethernet Interface

- Number of ports: 2 x LAN or 1 x LAN, 1 x WAN (10/100 Mbps)
- WAN port supports 802.3 at PD feature (optional)

#### WLAN Interface (optional)

- Standards: 802.11 b/g/n supporting AP and Client mode
- Data speed: 2\*2 MIMO, 300 Mbps
- Frequency band: 2.412 - 2.485 GHz
- Security: WEP, WPA, WPA2
- Encryption: 64/128 AES, TKIP
- Connector: RP-SMA, female

#### System

- 1 x Reset button
- LED indicators: 1 x RUN, 1 x PPP, 1 x USB, 3 x RSSI

#### Software

- Network protocols: PPP, TCP, UDP, DHCP, ICMP, NAT, DMZ, DDNS, VRRP, HTTP, HTTPS, DNS, ARP, SNTP, Telnet, SNMP etc.
- VPN tunnel: IPsec/OpenVPN/GRE
- Firewall: SPI, anti-DoS, Filter, Access Control
- Management methods: Web, SMS, CLI

#### Contact:

[www.robustel.com](http://www.robustel.com)

[info@robustel.com](mailto:info@robustel.com)

#### Power Supply and Consumption

- Connector: 3.5 mm terminal block
  - Input voltage:  
9 to 26V DC (A014401, A014402, A014403, A014404, A014405, A014406, A014701, A014702, A014703, A014704, A014705, A014706);  
9 to 36V DC
  - Power consumption: Idle: 100 mA @ 12 V  
Data link: 500 mA (peak) @ 12 V
  - PD feature: WAN interface supported, input voltage: 48~57V DC (optional)
- Note:** It is not recommended to use DC power supply and PD power supply simultaneously.

#### Physical Characteristics

- Housing & Weight: Metal, 300 g
- Dimensions: 127.5 x 82.5 x 29.5 mm
- Installations: Horizontal surface placement, wall mounting and DIN rail mounting

#### Regulatory and Type Approvals

- Approvals & Certificates: CE, RCM
- EMC:  
EMI: EN 55022: 2006/A1: 2007 (CE&RE) Class B  
EMS: IEC 61000-4-2 (ESD) Level 4,  
IEC 61000-4-4 (EFT) Level 3,  
IEC 61000-4-5 (Surge) Level 3

#### Package Contents

- 1 x Robustel R2000 Industrial Dual SIM Cellular VPN Router
- 1 x Terminal block for power
- 1 x *Quick Start Guide* with download link of other documents or tools

#### Optional Accessories (sold separately)

- AC/DC power adapter
- SMA cellular antenna (HSPA+/LTE)
- Stubby/magnet RP-SMA Wi-Fi antenna
- Wall mounting kit
- 35 mm DIN rail mounting kit