

## Dual SIM Industrial Cellular VPN Router

### for GPRS/EDGE/UMTS/HSPA/EVDO/4G LTE Networks

The Robustel GoRugged R3000 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.
- Antenna diversity for improved fringe performance optional.
- Two Ethernet ports, can be configured as two LANs or one LAN one WAN (supports wireless WAN and wired WAN backup).
- One RS232, one RS485, one console port, two digital inputs, two digital outputs, one high speed USB host up to 480 Mbps.
- Six LED indicators provide status and signal strength (RSSI).
- Wide range input voltages from 9 to 60 VDC and wide range operating temperature: -25 to 65 °C.
- The metal enclosure can be mounted on a DIN-rail or on the wall, also with extra ground screw.
- Network protocols such as PPP, PPPoE, TCP, UDP, DHCP, ICMP, NAT, DMZ, RIP, OSPF, DDNS, VRRP, HTTP, HTTPS.
- VPN tunnel: IPSec/OpenVPN/PPTP/L2TP client/server, GRE.
- Management via Web, CLI, SNMP.
- Supports Modbus/RTU to Modbus/TCP gateway.
- Auto reboot during a preset time of a day.
- Firmware upgrade via web interface.
- Supports RobustLink centralized M2M management platform



#### Applications

- ATM/Vending Machine Connectivity
- Solar/Wind Energy Monitor
- Distribution Automation
- Automatic Meter Reading
- Industrial Automation
- IP Video Surveillance
- Remote Devices

#### Selection and Ordering Data

Model No.	Description
R3000-2G	GPRS Router
R3000-2E	EDGE Router
R3000-3H	HSUPA Router
R3000-3P	HSPA+ Router
R3000-3E	EVDO Rev A/B Router
R3000-4L	FDD LTE Router
R3000-NU	Router, no cellular module

#### Packing List

- Robustel R3000 Router
- Terminal Block for Power, I/O and Serial Port
- Document and Software CD

#### Optional Accessories (can be purchased separately)

- AC/DC Power Supply Adapter
- Rubber SMA Antenna
- 35mm Din-Rail mounting kit or Wall mounting kit
- Diversity antenna for HSPA+/LTE

# GoRugged R3000

## Dual SIM Industrial Cellular VPN Router

### Specifications

#### Cellular Interface

- Standards: GSM/GPRS/EDGE/UMTS/HSPA/EVDO/FDD LTE
- GPRS/EDGE: 850/900/1800/1900 MHz
- HSPA+: 900/2100 or 850/1900 MHz optional, DL/UL 7.2/5.76 Mbps, fallback to 2G
- HSPA+: 850/900/1900/2100 or 900/2100 or 850/1900 MHz optional, DL/UL 21/5.76 Mbps, fallback to 2G
- FDD LTE: 800/900/1800/2100/2600 MHz or 700 MHz (B17 or B13) optional, DL/UL 100/50 Mbps, fallback to 3G/2G
- EVDO: 450 or 800/1900 MHz, Rev A/B
- SIM: 2 x (3V & 1.8V)
- Antenna Interface: SMA Female, 50 ohms impedance

#### Ethernet Interface

- Number of Ports: 2 x 10/100 Mbps, 2 LANs or 1 LAN 1 WAN
- Magnet Isolation Protection: 1.5KV

#### Serial Interface

- Number of Ports: 1 x RS-232, 1 x RS-485
- ESD Protection: 15KV
- Parameters: 8E1, 8O1, 8N1, 8N2, 7E2, 7O2, 7N2, 7E1
- Baud Rate: 300bps to 230400bps
- Flow Control: RTS/CTS, XON/XOFF
- RS-232: TxD, RxD, RTS, CTS, GND
- RS-485: Data+ (A), Data- (B), GND
- Interface: 3.5mm terminal block with lock

#### Digital Input

- Type: 2 x DI, Dry Contact
- Dry Contact: On: short to GND, Off: open
- Isolation: 3K VDC or 2K Vrms
- Digital Filtering Time Interval: Software selectable
- Over-voltage Protection: 36 VDC
- Interface: 3.5mm terminal block with lock

#### Digital Output

- Type: 2 x DO, Sink
- Over-voltage Protection: 40 VDC
- Over-current Protection: 0.5 A
- Isolation: 3K VDC or 2K Vrms
- Interface: 3.5mm terminal block with lock

#### System

- LED Indicators: 6 indicators, RUN, PPP, USB, RSSI, NET, SIM
- Built-in RTC, Watchdog, Timer
- Expansion: 1 x USB 2.0 host up to 480 Mbps
- Storage: 1 x MicroSD, can expand up to 2G

#### Software

- Network protocols: PPP, PPPoE, TCP, UDP, DHCP, ICMP, NAT, DMZ, RIP v1/v2, OSPF, DDNS, VRRP, HTTP, HTTPS, DNS, ARP, SSH, SNMP, Telnet
- VPN tunnel: IPSec/OpenVPN/PPTP/L2TP, GRE
- Firewall: SPI, anti-DoS, Filter, Access Control
- Management: Web, CLI, Telnet, SNMP v1/v2/v3
- Serial Port: TCP client/server, UDP, Virtual COM
- RobustLink: centralized M2M management platform

#### Power Supply and Consumption

- Power Supply Interface: 5mm terminal block with lock
- Input Voltage: 9 to 60 VDC
- Power Consumption: Idle: 100 mA @ 12 V  
Data Link: 400 mA (peak) @ 12 V

#### Physical Characteristics

- Housing & Weight: Metal, 500g
- Dimension: (L x W x H): 125 x 108 x 45 mm
- Installation: 35mm Din-Rail or wall mounting or desktop

#### Environmental Limits

- Operating Temperature & Humidity: -25 to 65°C, 5 to 95% RH
- Storage Temperature: -40 to 85°C

#### Regulatory and Type Approvals

- Approval & Detective: CE, FCC, PTCRB, A-Tick, RoHS, WEEE
- EMC: EN 61000-4-2 (ESD) Level 3, EN 61000-4-3 (RS) Level 4  
EN 61000-4-4 (EFT) Level 4, EN 61000-4-5 (Surge) Level 4  
EN 61000-4-6 (CS) Level 4, EN 61000-4-8, EN 61000-4-12

#### Warranty

- Warranty Period: 1 Year

