

## Router - TC MGuard RS2000 3G VPN - 2903441

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)



Security device with mobile phone interface. SD card slot. 2 VPN tunnels, 2-click firewall for easy configuration, router with NAT/1:1 NAT. 4-port switch. 2 SIM card slots. GPS receiver.

### Why buy this product

- ✓ High-speed mobile network interface with provider redundancy
- ✓ Integrated 4-port switch
- ✓ Maximum security with IPsec protocol on Layer 3
- ✓ Web-based management, SNMP
- ✓ Replaceable configuration memory
- ✓ RS-232 interface with COM server function for integrating serial devices
- ✓ Flexible routing
- ✓ 2 parallel VPN tunnels
- ✓ Supports current certificates such as x509.v3
- ✓ Stateful inspection firewall
- ✓ Extended temperature range



### Key Commercial Data

Packing unit	1 STK
GTIN	
GTIN	4046356752992

### Technical data

#### Note

Utilization restriction	EMC: class A product, see manufacturer's declaration in the download area
-------------------------	---

#### Dimensions

Width	45 mm
Height	130 mm
Depth	114 mm

# Router - TC MGUARD RS2000 3G VPN - 2903441

## Technical data

### Ambient conditions

Ambient temperature (operation)	-40 °C ... 60 °C
Ambient temperature (storage/transport)	-40 °C ... 70 °C
Permissible humidity (operation)	5 % ... 95 % (non-condensing)
Altitude	5000 m (For restrictions see manufacturer's declaration)
Degree of protection	IP20

### General

Electrical isolation	VCC // PE
Test voltage data interface/data interface	1 kV (50 Hz, 1 min.)
Test voltage data interface/power supply	1 kV (50 Hz, 1 min.)
Electromagnetic compatibility	Conformance with EMC Directive 2014/30/EU
Net weight	640 g
Housing material	Metal
Color	silver
MTTF	634 Years (Telcordia standard, 25°C temperature, 21% operating cycle (5 days a week, 8 hours a day))
	295 Years (Telcordia standard, 40°C temperature, 34.25% operating cycle (5 days a week, 12 hours a day))
	125 Years (Telcordia standard, temperature 40 °C, operating cycle 100 % (7 days a week, 24 hours a day))
Degree of pollution	2
Conformance	CE-compliant
UL, USA	Class I, Zone 2, AEx nA IIC T4
UL, USA/Canada	Class I, Div. 2, Groups A, B, C, D
UL, Canada	Class I, Zone 2, Ex nA IIC T4 Gc X

### Power supply

Supply voltage range	11 V DC ... 36 V DC (via pluggable COMBICON screw terminal block)
Max. current consumption	< 1.8 A (at 11 V DC (incl. 3 x 125 mA for the outputs))
Typical current consumption	< 320 mA (24 V DC)
Conductor cross section solid max.	2.50 mm <sup>2</sup>
Conductor cross section solid min.	0.20 mm <sup>2</sup>
Max. AWG conductor cross section, flexible	14
Min. AWG conductor cross section, flexible	24

### Serial interface

Interface 1	Ethernet interface, 10/100Base-T(X) in acc. with IEEE 802.3u
Interface	Ethernet
No. of ports	4
Connection method	RJ45
Transmission length	100 m (shielded twisted pair)
Protocols supported	TCP/IP, UDP/IP, FTP, HTTP
Auxiliary protocols	ARP, DHCP, PING (ICMP), SNMP V1, SMTP

# Router - TC MGUARD RS2000 3G VPN - 2903441

## Technical data

### Serial interface

Basic functions	Router with simplified 2-click firewall and VPN for 2 tunnels (fixed), metal housing, slot for any SD memory card
Interface 2	V.24 (RS-232) interface in acc. with ITU-T V.28, EIA/TIA-232, DIN 66259-1
Interface	RS-232
Connection method	D-SUB 9 plug
File format/coding	UART/NRZ: 8 Data, 1/2 Stop, None/Even/Odd Parity
Transmission length	15 m
Data flow control/protocols	Software handshake, Xon/Xoff or hardware handshake RTS/CTS
Serial transmission speed	9.6; 19.2; 38.4; 57.6; 115.2 kbps

### Radio interface

Interface description	GSM / GPRS / EDGE / UMTS / CDMA2000
Frequency	850 MHz (2 W (EGSM))
	900 MHz (2 W (EGSM))
	1800 MHz (1 W (EGSM))
	1900 MHz (1 W (EGSM))
	800 MHz (0.25 W (UMTS))
	850 MHz (0.25 W (UMTS))
	900 MHz (0.25 W (UMTS))
	1900 MHz (0.25 W (UMTS))
	2100 MHz (0.25 W (UMTS))
	800 MHz (CDMA2000 EV-DO)
	1900 MHz (CDMA2000 EV-DO)
Data rate	≤ 14.4 Mbps (HSDPA)
	≤ 5.7 Mbps (HSUPA)
	≤ 3.1 Mbps (DL CDMA2000)
	≤ 1.8 Mbps (UL CDMA2000)
Antenna	50 Ω impedance SMA antenna socket
SIM interface 1	1.8 volt, 3 volt
SIM interface 2	1.8 volt, 3 volt
GPRS	Class 12, Class B
	CS1 ... CS4
EDGE	Multislot Class 12
UMTS	HSPA 3GPP R6
Network function	4 time slots for receiving data, 4 time slots for transmitting data. The PIN is saved in the modem. After a voltage interruption, there is automatic redialing into the network. Integrated TCP/IP stack, firewall and VPN support, independent connection establishment.
Network check	LED bar graph to display receive quality
Protocols supported	GPS (Global Positioning System), GLONASS

### Function

# Router - TC MGUARD RS2000 3G VPN - 2903441

## Technical data

### Function

Web-based management	yes
Management	Web-based management, SNMP

### Digital outputs

Output name	Digital output
Number of outputs	3
Voltage output signal	10 V DC ... 30 V DC (depending on the operating voltage)
Current output signal	≤ 125 mA (Short-circuit-proof)

### Digital inputs

Description of the input	Digital input
Number of inputs	3
Voltage input signal	10 V DC ... 30 V DC
Current input signal	5 mA

### Standards and Regulations

Electromagnetic compatibility	Conformance with EMC Directive 2014/30/EU
Type of test	Free fall in acc. with IEC 60068-2-32
Test result	1 m
Type of test	Vibration resistance in acc. with EN 60068-2-6/IEC 60068-2-6
Test result	5g, 10...150 Hz, 2.5 h, in XYZ direction
Type of test	Shock in acc. with EN 60068-2-27/IEC 60068-2-27
Test result	Operation: 15g, 11 ms period, half-sine shock pulse
Type of test	Shock in acc. with EN 60068-2-27/IEC 60068-2-27
Test result	Storage: 30g, 11 ms period, half-sine shock pulse
Free from substances that could impair the application of coating	according to P-VW 3.10.7 57 65 0 VW-AUDI-Seat central standard
Standards/regulations	EN 61000-4-2
Contact discharge	± 6 kV (Test Level 3)
Standards/regulations	EN 61000-4-3
Frequency range	80 MHz ... 3 GHz (Test Level 3)
Standards/regulations	EN 61000-4-4
Comments	Criterion B
Standards/regulations	EN 61000-4-5
Signal	± 1 kV (Data line, asymmetrical)
Standards/regulations	EN 61000-6-4
	EN 61000-4-6
Frequency range	0.15 MHz ... 80 MHz
Conformance	CE-compliant
UL, USA	Class I, Zone 2, AEx nA IIC T4
UL, USA/Canada	Class I, Div. 2, Groups A, B, C, D
UL, Canada	Class I, Zone 2, Ex nA IIC T4 Gc X
Noxious gas test	ISA-S71.04-1985 G3 Harsh Group A

# Router - TC MGuard RS2000 3G VPN - 2903441

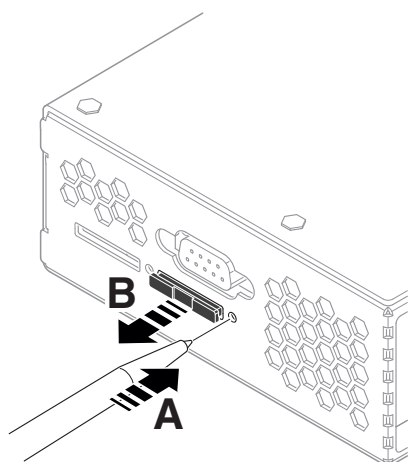
## Technical data

### Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

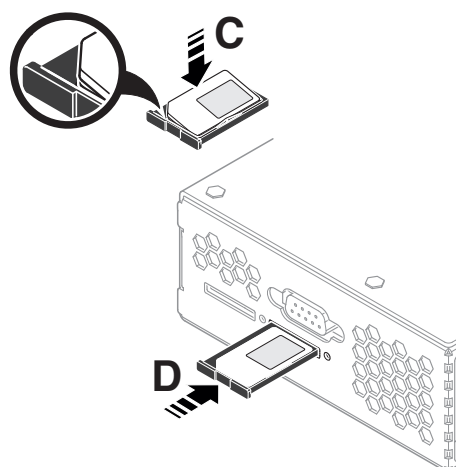
## Drawings

Schematic diagram



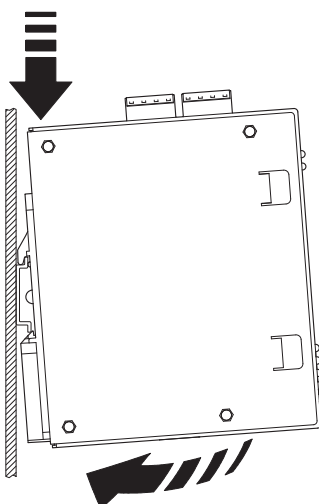
Remove SIM card holder

Schematic diagram



Insert the SIM card

Schematic diagram



Mounting

# Router - TC MGUARD RS2000 3G VPN - 2903441

## Approvals

### Approvals

---

#### Approvals

UL Listed / cUL Listed / cULus Listed




---

#### Ex Approvals

UL Listed / cUL Listed / cULus Listed

---

### Approval details

UL Listed		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 238705
cUL Listed		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 238705
cULus Listed			

---

Phoenix Contact 2018 © - all rights reserved  
<http://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG  
Flachsmarktstr. 8  
32825 Blomberg  
Germany  
Tel. +49 5235 300  
Fax +49 5235 3 41200  
<http://www.phoenixcontact.com>