



**Automatización Eléctrica**  
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Remote communication

Mobile phone network/  
MGUARD security routers



Industrial mobile phone routers featuring mGuard technology for global communication via UMTS and CDMA networks.

Thanks to the integrated high-speed mobile phone interface and 4-port switch in compact metal housing, the new **TC MGUARD RS2/4000 VPN** security appliances create a system for global, secure industrial remote communication.

They have an SD card slot at the front for configuration memory. The SD cards can be used for starting up or replacing the devices quickly and easily. The devices feature an extended temperature range and have a buffered realtime clock and trusted platform module (TPM) for secure key generation and management. They support precise time synchronization and positioning, specifically for mobile applications, via GPS and GLONASS.

The **TC MGUARD RS4000 3G** devices provide high-availability high-end security for industry and a remote maintenance infrastructure for the secure connection of machines and systems. For maximum availability, an additional external network is supported redundantly alongside the internal network (LAN) and the external network (WAN) in the form of the mobile phone interface. The integrated 4-port switch offers management features and supports EtherNet/IP™.

The **TC MGUARD RS2000 3G** devices are designed for applications with fewer complex requirements and allow secure remote maintenance of machines and systems in the field via the Internet. In this context, they are used as industrial remote service routers with a simplified configuration. The integrated 4-port switch saves valuable space on the DIN rail.

Both versions have all the necessary standard functions for operating an Ethernet network that is both flexible and robust.

**Features:**

- Port mirroring
- Configuration can be stored externally
- Web-based management, SNMP
- Replaceable configuration memory
- Comprehensive connection options
- Flexible routing
- Intelligent stateful inspection firewall
- Secure remote services (VPN) according to IPsec standard

**Serial device server included**

The integrated COMSERVER function is used to integrate serial RS-232 interfaces into Ethernet networks. This provides an easy way of implementing functions such as cable replacement or network integration.

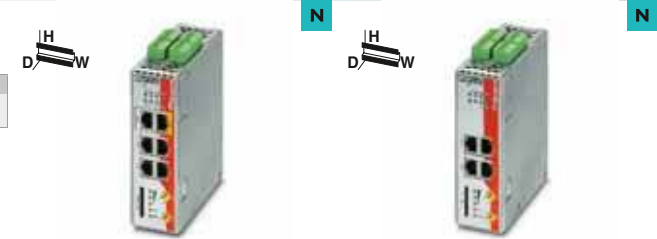
– Cable replacement: two devices in combination tunnel serial connections via Ethernet

– Network integration: you can integrate automation devices such as controllers or frequency inverters into a network using corresponding programming and diagnostics software

**Device Manager**

The Device Manager simplifies the management of MGUARD security appliances. The tool features a template mechanism that enables the user to configure and manage all MGUARD devices centrally – from a few hundred devices to several thousand.

Remote communication



UMTS/HSPA mobile phone router with firewall and VPN, manageable 4-port switch, DMZ port and second WAN interface

UMTS/HSPA mobile phone router with firewall and VPN, integrated 4-port switch

**Notes:**  
Central device management software, the Device Manager for FL MGUARD devices, can be found on page 45

Technical data	
Supply	10 V DC ... 30 V DC (via plug-in COMBICON screw terminal block)
Supply voltage	10 V DC ... 30 V DC (via plug-in COMBICON screw terminal block)
Nominal current consumption	< 200 mA (24 V DC)
Ethernet interface	RJ45 socket, shielded
Connection method	10/100 Mbps, autonegotiation
Transmission speed	100 m (shielded twisted pair)
Transmission length	
Functions	Web-based management, SNMP
Management	Router with intelligent firewall and VPN for 10 tunnels (up to 250 supported with optional additional license), CIFS Integrity Monitoring (as an option), metal housing, slot for SD memory card
Basic functions	
Security functions	
Number of VPN tunnels	10 (as an option, up to 250, with additional license FL MGUARD LIC VPN-250/ Order No. 2700193 or 2700192)
Encryption methods	DES, 3DES, AES-128, -192, -256
Internet Protocol Security (IPsec) mode	ESP-Tunnel / ESP-Transport
Authentication	X.509v3 certificates with RSA or PSK
Firewall rules	Configurable stateful inspection firewall with full scope of functions
Routing	Standard routing, NAT, 1:1-NAT, port forwarding
Mobile phone network	
Frequencies	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)
SIM interface	1.8 volt, 3 volt
GPRS compatibility	Class 12, Class B
Network check	LED bar graph to display receive quality
Antenna connection	50 Ω impedance SMA antenna socket
Input/output	
Switching input	3 x U <sub>nom</sub> , input range: 10 V DC ... 30 V DC/5 mA
Switching output	3 x U <sub>nom</sub> , input range: 10 V DC ... 30 V DC/250 mA, short-circuit-proof
General data	
Ambient temperature (operation)	-20 °C ... 60 °C
Electrical isolation	(VCC // PE)
Test voltage	1 kV (50 Hz, 1 min.)
Dimensions	45 mm / 130 mm / 114 mm

Technical data	
Supply	10 V DC ... 30 V DC (via plug-in COMBICON screw terminal block)
Supply voltage	10 V DC ... 30 V DC (via plug-in COMBICON screw terminal block)
Nominal current consumption	< 200 mA (24 V DC)
Ethernet interface	RJ45 socket, shielded
Connection method	10/100 Mbps, autonegotiation
Transmission speed	100 m (shielded twisted pair)
Transmission length	
Functions	Web-based management, SNMP
Management	Router with simplified 2-click firewall and VPN for 2 tunnels (fixed), metal housing, slot for any SD memory card
Basic functions	
Security functions	
Number of VPN tunnels	2 (fixed, Ipsec (IETF standard))
Encryption methods	DES, 3DES, AES-128, -192, -256
Internet Protocol Security (IPsec) mode	ESP-Tunnel / ESP-Transport
Authentication	X.509v3 certificates with RSA or PSK
Firewall rules	Simplified 2-click stateful inspection firewall
Routing	Standard routing, NAT, 1:1-NAT, port forwarding
Mobile phone network	
Frequencies	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)
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Ordering data		
Type	Order No.	Pcs. / Pkt.
TC MGUARD RS4000 3G VPN	2903440	1

Accessories		
Item	Order No.	Pcs. / Pkt.
SD FLASH 256MB	2988120	1
FL MGUARD LIC VPN-250	2700193	1
FL MGUARD LIC VPN-250 GROUP	2700192	1

Ordering data		
Type	Order No.	Pcs. / Pkt.
TC MGUARD RS2000 3G VPN	2903441	1

Accessories		
Item	Order No.	Pcs. / Pkt.
SD FLASH 256MB	2988120	1



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Product	Code	Reference	Product link
Program and configuration memory, plug-in, 256 MB	2988120	SD FLASH 256MB	<a href="#">Buy on EAN</a>