MICROSENS

Data sheet
5G Industrial Cellular Router

5G/4G/3G Router
Worldwide usable via cellular network

1G Ports (IEEE 802.3ab)
All TCP/IP ports in Gigabit Ethernet design

PoE PD operation
Power supply via PoE PD feasible

IT Security
Feature set for high level of IT security

Extended operating temperature range
Ambient temperature range -25°..+70°C

Fanless design
Easy to maintain hardware design, no noise emissions

Technical Specifications

Cellular Interface

Number of antennas	4 (ANT0, ANT1, ANT2, ANT3)
Connector	SMA-K
SIM-Card	2x (3 V & 1.8 V), Standard SIM

GNSS

Number of antennas	2 (ANT1, ANT2, Multiplexing cellular antenna interface)
Connector	SMA-K
GNSS technology	GPS/GLONASS(BeiDou (Compass)/Galileo)
Position accuracy	<2m (horizontal)

Ethernet Interface

Number	4
Type	Gigabit Ethernet, 10/100/1000Base-T, 4x LAN, (Configurable to 1x WAN & 3x LAN)
Connector	RJ-45 Port, shielded
Power-over-Ethernet	Powered Device (PD) IEEE 802.3at at Port ETH0

WiFi Interface

Number of antennas	2 (WiFi 1 & WiFi 2)
Connector	RP-SMA-K
Standards	802.11b/g/n/ac 2*2 MIMO, Supports AP and Client Mode
Frequency bands	2,412 – 2,472 GHz (2,4 GHz ISM Band) 5,15 – 5,825 GHz (5 GHz ISM Band)
Security	WPA, WPA2, WEP
Encryption	AES, TKIP, WEP64
Data speed	5G: Up to 867 Mbps 2,4G: Up to 300 Mbps

USB Interface

Number	1
Type	USB 2.0 Host
Power	5V, 500 mA

Serial Interface

Number	1x RS232 1x RS485
Connector	2x 5-Pin 3,5 mm female socket
Baud rate	300 bps to 115.200 bps
Signal definition	RS232: TXD, RXD, GND RS485: Data+ (A), Data- (B), Ground (GND)

Digital In / Out

Number	1x Digital Input 1x Digital Output
Connector	2x 5-Pin 3,5 mm female socket
Max. Voltage	30 VDC (Digital Input) 30 VDC (Digital Output)
Max. Current	100 mA
Isolation	3,75 kV DC

LEDs

Device LEDs	Operation, Modem, USR, RSSI, Net, WiFi

Power supply

Input Voltage	10..30 VDC
Power Consumption	Idle: 500 mA at 12 VDC Peak: 1,2 A at 12 VDC
Connector	3-Pin 3,5 mm female socket with lock

Environmental Conditions

Temperature	Operation	-25..+70 °C
	Storage	-40..+85 °C
Humidity	5..95%, non-condensing	

Mechanic

Dimensions (in mm)	125 x 100 x 48 (W x D x H, without connectors/antennas)
Material	Aluminium
Weight	Approx. 0,5 Kg
Installation	Desktop-, DIN Rail or wall mounting
IP-Rating	IP30

Standars

EMC	CE
Electrical safety	CE

Firmware Features

System Management

- WEB GUI (http/https)
- CLI
- SMS

Supported Protocols

- PPP
- PPPoE
- TCP
- UDP
- ICMP
- NAT
- HTTP
- HTTPS
- DNS
- ARP
- NTP
- SMTP
- Telnet
- SSH2
- DDNS

VPN Tunnel

- IPsec
- Open VPN
- GRE

Firewall

- DMZ
- Anti-DoS
- Filtering (IP/Domain Name/MAC-address)
- Port Mapping
- Access Control

Serial Port

- Transparent
- TCP Client/Server
- UDP
- Modbus RTU to TCP

Order Information

Description	Article-No.:
5G Industrial Cellular Router	
5G Industrial Cellular Router 5/4/3G, GNSS, Wi-Fi, USB, PIN-Console, I/O, 4x 10/100/1000Base-T, 1x PD, 10..30VDC, DIN-Rail, managed, -25..70°C	**MS659100M**

Accessories

Description	Article-No.:
24VDC DIN-Rail Power supply	
Industrial DIN-Rail power supply 24VDC/1,25A (30W) Input: 100..240VAC/120..375VDC, Output: 24..28VDC, -20..+70°C	**MS700440**

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