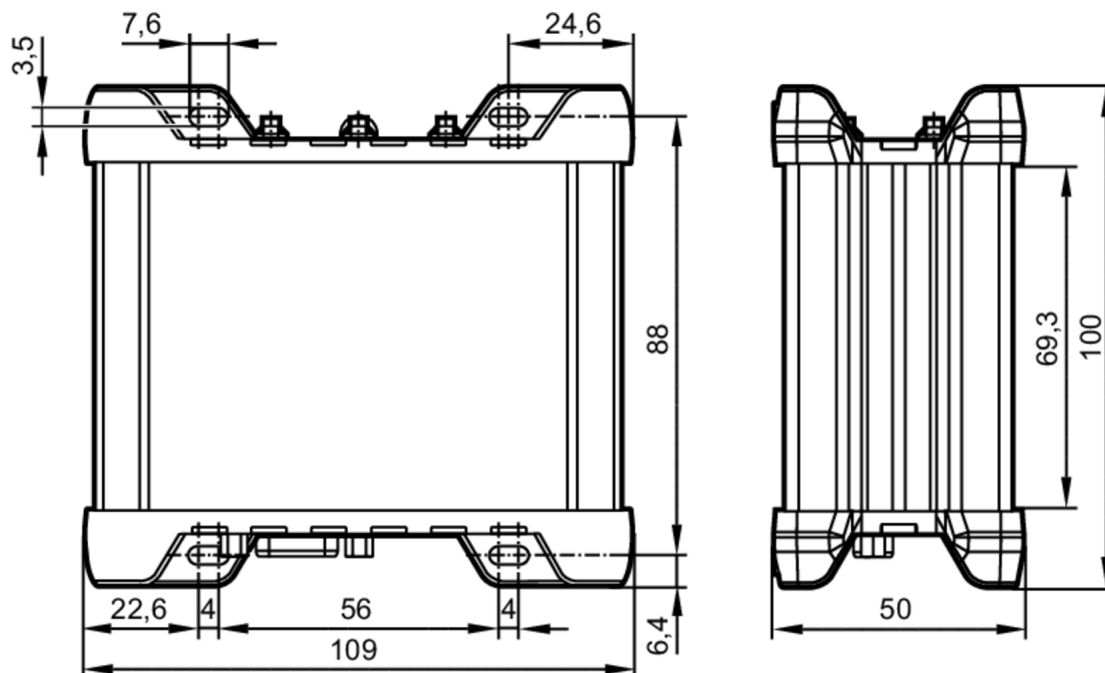


CR3170



LTE/GNSS/Ethernet router

4G/LTE Cellular Router



Application

Radio approval for	EU/RED; USA; Canada
Note on radio approval	The list of countries applying the European Radio Equipment Directive 2014/53/EU (RED) can be found under "Downloads".

Electrical data

Operating voltage	[V]	9...30 DC
Nominal voltage DC	[V]	12 / 24
Power consumption	[W]	2; (maximum: 7 W)

Inputs / outputs

Number of inputs and outputs	Number of digital inputs: 3; Number of digital outputs: 2; Number of relay outputs: 1
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Inputs

Number of digital inputs	3
Analogue input (voltage)	[V] 0...24

Outputs

Number of digital outputs	2
Voltage range DC	[V] < 30
Permanent current rating of switching output DC	[mA] 300
Number of relay outputs	1

Interfaces

Communication interface	WLAN; Mobile networks; Ethernet; RS232; RS485
Number of USB interfaces	1



LTE/GNSS/Ethernet router

4G/LTE Cellular Router

Mobile networks		
Transmission standard	GSM; GPRS; EDGE; UMTS; HSPA; 3G; 4G; LTE Cat-4	
Frequency band	GSM / GPRS / EDGE / 2G: 850 / 900 / 1800 / 1900; UMTS / HSPA / 3G: 800 (B6, B19) / 850 (B5) / 900 (B8) / 1700 (B4) / 1900 (B2) / 2100 (B1); 4G / LTE Cat 4: 700 (B12) / 750 (B13, B28) / 800 (B20) / 850 (B5, B18, B19, B26) / 900 (B8) / 1700 (B4) 1800 (B3) / 1900 (B2, B25, B39) / 2100 (B1) / 2300 (B40) / 2500 (B41) / 2600 (B7, B38)	
Transmission power	[mW]	GSM: 1995,26; WCDMA: 251,19; LTE: 199,53
Note on interfaces	2x SIM card slot	
	SIM1: SIM-Karte von ifm fest verbaut	
USB		
Connector type	USB A	
Usage type	Periphery connection	
WLAN		
Transmission standard	IEEE 802.11 b/g/n	
Frequency band	2,4 GHz	
Transmission power	[mW]	53.23; (2,4 GHz: 100 mW)
Operating conditions		
Ambient temperature	[°C]	-40...75
Protection	IP 30	
Mechanical data		
Weight	[g]	423.2
Materials	housing: aluminium; Operating elements: plastics	
Displays / operating elements		
Display	status	1 x LED, 2-colour
	signal strength	5 x LED
	status	4 x LED, LAN
	supply voltage	1 x LED
Hardware		
Processor	Atheros Wasp, MIPS 74Kc, 550 MHz	
RAM	128 MB DDR2	
Accessories		
Items supplied	SIM card unlocking tool: 1	
	connectors: 1, RS485	
	connectors: 1, inputs / outputs	
	Connection cable: 1, power supply	
Remarks		
Pack quantity	1 pcs.	



LTE/GNSS/Ethernet router

4G/LTE Cellular Router

Electrical connection - GNSS

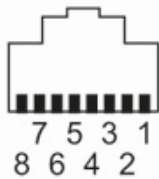
Connector: 1 x SMA



- | | |
|---|--------|
| 1 | signal |
| 2 | screen |

Electrical connection - LAN/WAN

Connector: 4 x RJ45



Electrical connection - LTE

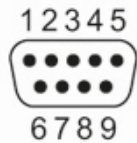
Connector: 2 x SMA



- | | |
|---|--------|
| 1 | signal |
| 2 | screen |

Electrical connection - RS232

Connector: 1 x SUB-D



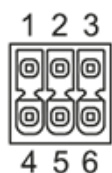


LTE/GNSS/Ethernet router

4G/LTE Cellular Router

Electrical connection - RS485

Connector: 1 x



1	D_N
2	R_N
3	GND
4	D_P
5	R_C
6	N/C

Electrical connection - WLAN

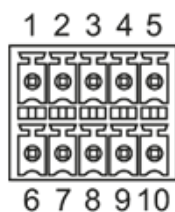
Connector: 2 x SMA



1	signal
2	screen

Electrical connection - inputs / outputs

Connector: 1 x



I/O

1	digital input potential-free
2	digital input Electrically separated 0...30 V DC
3	digital output OC Electrically separated 0...30 V DC
4	digital output OC 0...30 V DC
5	relay output COM
6	GND pin 1, 9
7	GND pin 2
8	GND pin 3, 4
9	analogue input 0...24 V
10	relay output NO 24 V DC / 40 V AC / 4 A

CR3170

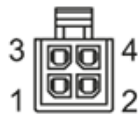


LTE/GNSS/Ethernet router

4G/LTE Cellular Router

Electrical connection - supply connection

Connector: 1 x



1	digital input
2	digital output
3	supply voltage
4	Ground