

## JetTelematicsMobile 4G

### Telemetry for mobile machines

#### Short description

The JTM telemetry device is the universal component that prepares any mobile machine for the era of digitalization. Its rugged design and well-positioned wireless connectivity capabilities make it the perfect companion for monitoring and managing entire fleets of mobile machines.

The device communicates wirelessly via LTE CAT-1 and WiFi or in the vehicle network via CAN and USB. In this way, it can be easily integrated into CAN networks of mobile machines. The choice between different software packages allows you to find the optimal fit for your individual connectivity strategy. To extend the connectivity possibilities within the machine network, additional hardware extensions can be added.

The compact design with internal antenna allows flexible and space-saving installation on the machine. The module is designed to be used in a harsh and difficult environment.



#### Product Features

- LTE CAT-1 wireless connectivity with 2G fallback option for mobile connectivity in field applications
- Get remote access to multiple machines, saving costs and improving TCO
- On-site diagnostics via internal web server and WiFi interface
- Track your vehicles in the field with a GNSS receiver
- All necessary antennas are built in
- Additional hardware expansion modules allow flexible modification of your vehicle network architecture
- 3 LEDs enable quick diagnostics
- Rugged and compact housing for flexible installation on the machine

# JetTelematicsMobile 4G

## Technical data

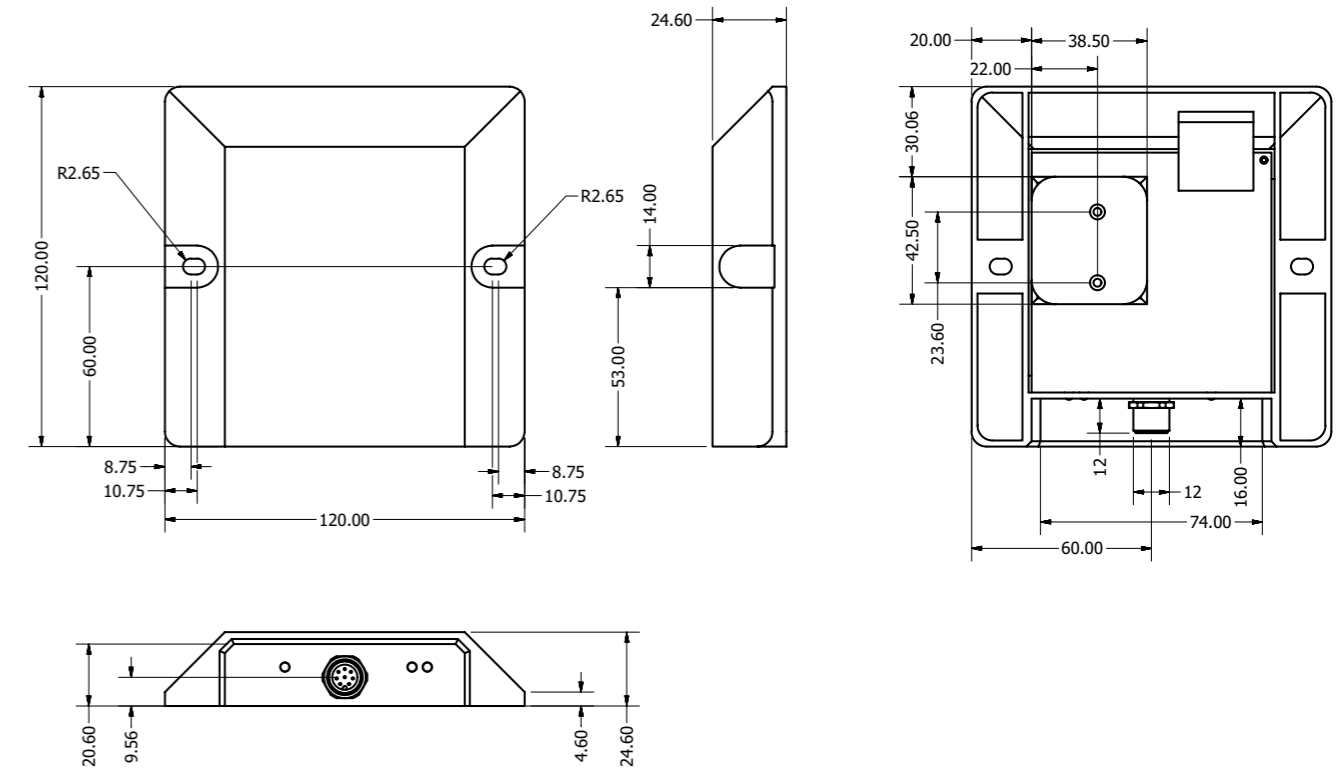
JetTelematicsMobile 4G	
Operating voltage	DC 8 ... 32 V
Operating temperature range	-40 °C ... +85 °C
Ports and interfaces	
EU-4G modem	LTE CAT-1 with internal antennas; 10 Mbps downstream; 5 Mbps upstream; 4G LTE bands: B1, B3, B7, B8, B20, B28; 2G bands (EDGE, GSM, GPRS): 900MHz, 1800MHz
WiFi	IEEE 802.11 b/g/n; internal antenna
CAN	CAN 2.0 B
USB	1x USB 2.0 (host/client)
Sensors	
Site	GNSS receiver (GPS and GLONASS)
Acceleration	3D acceleration sensor
Hardware	
LEDs	3x for diagnostics; programmable
SIM	1x Micro-SIM socket (order option: pre-installed SIM)
SD card	1x microSD socket (order option: pre-installed industrial grade 8 GB card)
RTC	Goldcap backed RTC
Memory	256 MB RAM; 512 MB flash
CPU	Application processor: ARM® Cortex™ - A7 (1.3 GHz) Field bus processor: ARM® Cortex™ - M3 (72 MHz)
Mechanical parameters	
Dimensions	120x120x25 mm
Mechanical installation	2x M5 screws
Mounting orientation	Vertical or horizontal
Weight	~ 350 g
Connector	M12 8-pin male
Shock & vibration	ISO 16750-3
Software	Linux-based; with Open Source Legato® Framework
Compatibility	ISO 14982, 2011/65/EU (RoHS)
Certifications	R.E.D. (CE), C1

Further details and order information are available on request. Specifications are subject to change without notice. Errors and omissions excepted.

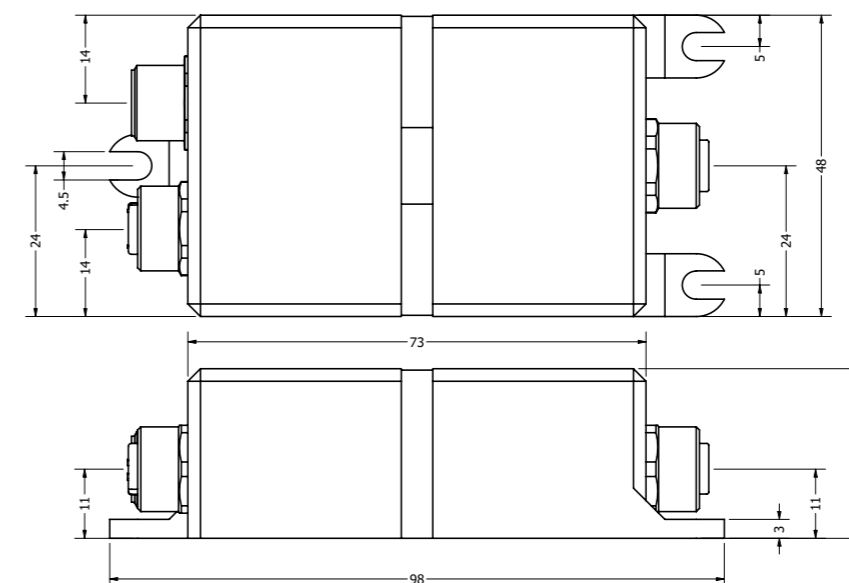
## Hardware expansion module (external Ethernet module)

JXM-TE-E01	
Ethernet	10/100 BaseT
Operating voltage	DC 9 ... 30 V
Typical energy consumption	1.2 W
Dimensions	96x28x48 mm
Weight	165 g
Degree of protection	IP67
UV radiation protection	Resistant to direct sunlight

## Dimensional drawing JetTelematicsMobile 4G



## Dimensional drawing JXM-TE-E01



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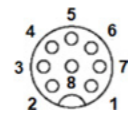
## Pin assignment of JetTelematicsMobile 4G

JetTelematicsMobile 4G	
UB+ (Power Supply +12 V)	1
GND (Ground)	2
CAN2-L	3
USB Data+	4
CAN1-L	5
USB Data-	6
CAN2-H	7
CAN1-H	8

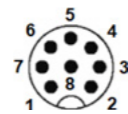
Pin 4, 6: High frequency. For USB option a shielded and twisted pair cable is required.

## Pinout of the JXM-TE-E01

JXM-TE-E01   M12 connector, female, A-coded Uplink to the JTM-4G	
UB+ (Power Supply +12 V) output	1
GND (Ground)	2
CAN2-L	3
USB Data+ (device)	4
CAN1-L	5
USB Data- (device)	6
CAN2-H	7
CAN1-H	8



JXM-TE-E01   M12 connector, male, A-coded Power consumption, USB-HOST	
UB+ (Power Supply +12 V) input	1
GND (Ground)	2
CAN2-L	3
USB Data+ (host)	4
CAN1-L	5
USB Data- (host)	6
CAN2-H	7
CAN1-H	8



JXM-TE-E01   M12 connector, female, D-coded 10/100 Base-T ETHERNET	
TD+	1
RD+	2
TD-	3
RD-	4

