

# MC100

## Terminal/Gateway Global



 **made  
in  
Germany**



The MC100 Data terminal and MC100 Gateway have an integrated 4G LTE modem and an Ethernet interface. It allows easy connection of connected devices to the Internet using mobile network.

Thanks to Node-RED™, a simple graphic programming tool, or other programming tools, the data recorded by multiple measuring devices can be read wirelessly. Data can then, using a wide range of pre-configured transmission protocols, be uploaded to company servers or cloud services.

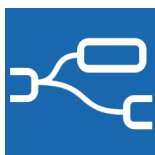
The MC100 Gateway is also equipped with additional hardware interfaces.

### Key features & functionalities:

- Programmable 4G LTE Terminal/Gateway
- Quectel EG25-G module integrated
- Out of the box ready for mobile Internet communication
- OpenWrt 21 based Linux distribution, Kernel 5.4.154, optimized for the ARM-based MC100 Gateway
- Node-RED™ – flow-based programming tool pre-installed
- Supports comprehensive cloud and server protocols
- Configuration via web interface
- Free programmable



4G LTE



Node-RED™



OpenWrt Linux



Cloud-Service



GPS/GNSS



WLAN\*  
(optional)



Bluetooth  
(optional)



10/100 MBit/s  
Ethernet



USB 2.0\*



RS-232\*



RS-485\*



CAN 2.0B\*



2in/2out\*

\* only Gateway

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## Technical Data

General	Description	Terminal	Gateway
Type	Wireless 4G LTE global gateway	x	x
Dimensions (W x H x D)	120 x 75 x 35 mm	x	x
Weight	approx. 140 g	x	x
Supply voltage	8 to 30 V DC	x	x
Operation temperature	-20 °C to +70 °C	x	x
Housing	Plastic	x	x
Protection class	IP20	x	x
Mounting	Wall mounting (DIN rail adapter optional)	x	x
Wireless module embedded	Quectel EG25-G	x	x
<b>Mobile</b>			
Supporting networks	<b>LTE FDD:</b> Bands: 1, 2, 3, 4, 5, 7, 8, 12, 13, 18, 19, 20, 25, 26, 28 <b>LTE-TDD:</b> Bands: 38, 39, 40, 41 <b>WCDMA:</b> Bands: 1, 2, 4, 5, 6, 8, 19 <b>WI-FI:</b> 2.4 GHz + 5 GHz <b>GSM:</b> Bands: 2, 3, 5, 8 <b>GNSS:</b> GPS, GLONASS, BDS, Galileo	x	x
Transmission rates LTE-FDD	DL/UL max. 150/50 Mbps	x	x
Transmission rates LTE-TDD	DL/UL max. 130/30 Mbps	x	x
Transmission rates DC-HSDPA	DL max. 42 Mbps	x	x
Transmission rates HSUPA	UL max. 5.76 Mbps	x	x
Transmission rates WCDMA	DL/UL max. 384/384 kbps	x	x
Transmission rates EDGE	DL/UL max. 296/236.8 kbps	x	x
Transmission rates GPRS	GPRS DL/UL max. 107/85.6 kbps	x	x
Antenna connections	SMA (female)	2	2
<b>Controller, Memory and OS</b>			
Controller	ARM Cortex-A7 NXP i.MX 6 UltraLite, 528 MHz	x	x
RAM	512 MB	x	x
Flash	4 GB	x	x
OS	OpenWrt Linux	x	x
Programmable	C/C++, Python™, Java™, Node-RED™ or others	x	x
<b>Interfaces controller board (sides)</b>			
Power	Plug-in screw-type terminal	1	1
Ethernet	10/100 MBit/s	1	1
RS-232	DB9 (RX,TX,RTS,CTS)	-	1
RS-485	Not galvanic isolated, plug-in screw-type terminal	-	1
USB	USB 2.0 Type A	-	1
Digital inputs	Galvanic isolated, special common GND (IGND), 0 - 30V, threshold 6V	-	2
Digital outputs	Galvanic isolated, special common GND (IGND), solid state relays, 300mA max low-side-switch to IGND	-	2
CAN	CAN 2.0B, plug-in screw-type terminal	-	1
LED 1	Power	x	x
LED 2, 3 and 5	Free programmable	x	x
LED 4	GSM	x	x
SIM	Mini SIM	x	x
SD card	Micro SD, up to 32 GB (internal)	x	x
GPS	GPS/GNSS (GLONASS/BeiDou/Galileo)	x	x
WLAN	802.11 b/g/n	-	x
<b>Other properties</b>			
Configurations	Basic configuration via web interface, SSH	x	x
RS-232 console port	on RS232 interface (optional)	-	x
Approvals	CE; Country-specific approvals upon request	x	x
<b>Delivery includes</b>			
Wall adapter	Plastic holder	x	x
Printed documentation	Quick Guide	x	x

Mistakes and changes are reserved.

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## Variants / Accessories

Variants		Part-Number	
		Terminal	Gateway
MC100 Global		162510	162802
MC100 Global	mit WLAN	-	162220
MC100 Global	mit Bluetooth Dongle	193981	-
Accessories		Part-Number	
Top-hat rail bracket KIT	for DIN rail mounting	100046	100046
Power supply / Mount Adapter EU	18 W AC/12 V DC 1,5A	100909	100909
Network cable	Cat. 5, 1 m	100810	100810
Data cable	Adapter cable for ASC1, RS232 (SuB D9, female) - 1m - 3pin plug	-	162500
MiMo wall antenna	5G/4G/MIMO/3G/2G, 2x 2 m RG174, 2x SMA (male)	193600	193600
Portable antenna	GSM/UMTS/LTE/WLAN, SMA (male)	101292	101292
GPS antenna	1575.42 MHz, 2 dBi, 3 m RG174 SMA (male), magnetic	101259	101259

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