

4G LTE IoT data terminal and gateway with Ethernet interface

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:

- Data terminal or programmable gateway with mobile 4G LTE modem
- Fallback to 3G and 2G networks
- Ready for mobile Internet communication
- Data terminal: Ethernet interface
- Gateway: Ethernet, RS232, RS485, USB, CAN-Bus interfaces, two digital inputs, two digital outputs
- OpenWrt Linux distribution 19.07 based on Kernel 4.14, optimized for the ARM-based MC100 Gateway
- Node-RED™ – flow-based programming tool already installed
- Contains Node-RED™ nodes for all hardware interfaces (gateway)
- Supports comprehensive cloud and server protocols
- Configuration via web interface
- Data storage on internal Flash or Micro-SD card
- Extended temperature range, industrial platform
- Wall or DIN rail mounting

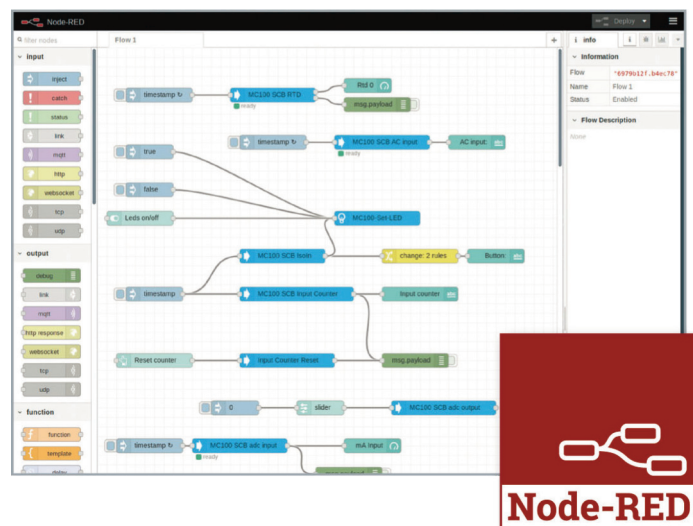
Optionally available with:

- Data terminal with GPS
- Gateway with WLAN

MC 100 Gateway Layer Model

Cloud and Server Protocols	OPC UA, MODBUS TCP, MQTT, CLOUD OF THINGS, HTTP, FTP, MS AZURE, E-MAIL, TELEGRAM, SMS
Applications	Node-RED™, Python™, Java™ und weitere
Hardware Interfaces	2 digitale Eingänge, 2 digitale Ausgänge, CAN Bus, RS485, RS232

Node-RED™ – MC 100 Gateway Layer Model graphical development tool



Node-RED™ is a trademark of the JS Foundation.
JAVA™ is a trademark of Oracle.
Python™ is a trademark of the Python Software Foundation



Product		MC100	
Model		Terminal	Gateway
General	Description		
Type	Wireless 4G LTE gateway with Linux OS and Ethernet interface	x	x
Dimensions (W x H x D)	120 x 75 x 35mm	x	x
Supply voltage	8 to 30V DC	x	x
Operation temperature	-20°C to +70°C	x	x
Storage temperature	-25 °C to +100 °C		
Housing	Plastic	x	x
Mounting	Wall mounting (DIN rail adapter optional)	x	x
Mobile			
Supporting networks	LTE Cat1 (4G): Band 1,3,5,7,8 and 20 HSDPA/HSUPA/HSPA+ (3G): Band 1,5,8, all bands with diversity GSM/GPRS/EDGE (2G): Band 3,8	x x x	x x x
Transmission rates LTE	Up to 5 Mbps uplink and 10 Mbps downlink	x	x
Transmission rates HSPA+	Up to 5.76 Mbps uplink and 21.6 Mbps downlink	x	x
Transmission rates EDGE	Up to 236.8 kbps uplink and 236.8 kbps downlink	x	x
Transmission rates GPRS	Up to 85.6 kbps uplink and 85.6 kbps downlink	x	x
Antenna connections	SMA (female)	2	2
Other wireless networks			
GPS	GPS/GLONASS: L1	Optional	-
WLAN	802.11 b/g/n	-	Optional
Antenna connections	SMA-F	x	x
Controller, memory and OS			
Controller	ARM Cortex-A7, 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
Interfaces			
Ethernet	10/100 MBit/s	x	x
USB	USB 2.0 Type A	-	x
Digital inputs	Galvanic isolated, special common GND (IGND), 0 - 30V, threshold 6V	-	2
Digital outputs	Galvanic isolated, special common GND (IGND), solid state relais, 300mA max low-side-switch to IGND	-	2
RS232	DB9 (RX,TX,RTS,CTS)	-	x
RS485	Plug-in screw-type terminal	-	x
CAN	CAN 2.0B, plug-in screw-type terminal	-	x
Power	Plug-in screw-type terminal	x	x
LED 1	Power	x	x
LED 2 and 3	Free programmable	x	x
LED 4	GSM	x	x
LED 5	GPS	Optional	
SIM	Mini-SIM (opt. embedded SIM)	x	x
SD card	Micro SD, up to 64 GB (internal)	x	x
Other properties			
Configurations	Basic configuration via web interface, SSH	x	x
RS232 console port	On RS232 interface	-	x
Delivery includes			
Wall adapter	Plastic holder	x	x
Connectors	WR-TBL Series 361 - 3.81mm vertical cable entry plug (Würth)	x	x
Printed documentation	Quick Guide	x	x
Part-Number			
MC100		160487	160480
MC100 with GPS		160638	-

Mistakes and changes are reserved.