MC100

Gateway Audio

made in Germany

The MC100 Audio Gateway has 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 Audio Gateway is also equipped with GPS, WLAN and Audio interface.

Key features & functionalities:

- Programmable 4G LTE Terminal/Gateway

- Quectel EC21-E module integrated

- Out oft the box ready for mobile Internet communication

- OpenWrt 24.10 based Linux distribution, Kernel 6.6.93, 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

- E1 approval
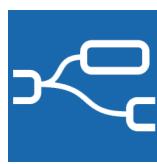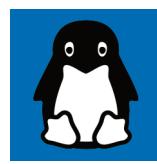
4G LTE	Node-RED™	OpenWrt Linux	Cloud-Service	Audio	WLAN	GPS
10/100 MBit/s Ethernet	RS-232	USB 2.0	RS-485	CAN 2.0B	2in/2out	E1 approval ECE R10/R118
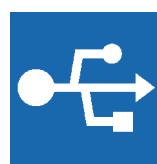
MC100 Gateway Audio

Technical Data

General	Description	193250
Type	Wireless 4G LTE gateway with audio interfaces	x
Dimensions (W x H x D)	120 x 75 x 35 mm	x
Weight	approx. 160 g	x
Supply voltage	8 to 30 V DC	x
Operation temperature	-20 °C to +70 °C	x
Housing	Plastic	x
Protection class	IP20	x
Mounting	Wall mounting (DIN rail adapter optional)	x
Wireless module embedded	Quectel EC21-E	x
Mobile		
Supporting networks	**LTE Cat1:** Bands: 1, 3, 5, 7, 8, 20	x
	WCDMA: Bands: 1, 5, 8	x
	GSM/GPRS/EDGE: Bands: 3, 8	x
Transmission rates LTE	Up to 5 Mbps uplink and 10 Mbps downlink	x
Transmission rates HSPA+	Up to 5.76 Mbps uplink and 42 Mbps downlink	x
Transmission rates WCDMA	Up to 384 kbps uplink and 384 kbps downlink	x
Transmission rates EDGE	Up to 236.8 kbps uplink and 296 kbps downlink	x
Transmission rates GPRS	Up to 85.6 kbps uplink and 107 kbps downlink	x
Antenna connections	SMA (female)	x
Controller, Memory and OS		
Controller	ARM Cortex-A7 NXP i.MX 6 UltraLite, 528 MHz	x
RAM	512 MB	x
Flash	4 GB	x
OS	OpenWrt 24.10 based Linux distribution	x
Programmable	C/C++, Python™, Java™, Node-RED™ or others	x
Interfaces		
Power	Plug-in screw-type terminal	1
Ethernet	10/100 MBit/s	1
RS232	DB9 (RX,TX,RTS,CTS)	1
RS485	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 - 30 V, threshhold 6 V	2
Digital outputs	Galvanic isolated, special common GND (IGND), solid state relais, 300 mA max low-side-switch to IGND	2
CAN	CAN 2.0B, plug-in screw-type terminal	1
LED 1	Power	x
LED 2 and 3	Free programmable	x
LED 4	GSM	x
SIM	Mini SIM	x
SD card	Micro SD, up to 32 GB (internal)	x
GPS	GPS/GNSS (GLONASS/BeiDou/Galileo)	x
WLAN	802.11 b/g/n	x
Audio	M8, 4pin	x
Other properties		
Configurations	Basic configuration via web interface, SSH	x
RS232 console port	on RS232 interface	x
E1 approval		x
Delivery includes		
Wall adapter	Plastic holder	x
Connectors	WR-TBL Series 361 - 3.81 mm vertical cable entry plug (Würth)	x
Printed documentation	Quick Guide	x

Mistakes and changes are reserved.

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Accessories

Accessories		Part No.
Top-hat rail bracket KIT	for DIN rail mounting	100046
Power supply / Mount Adapter EU	18 W AC/12 V DC 1,5A	100909
Network cable	Cat. 5, 1 m	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
Portable antenna	GSM/UMTS/LTE/WLAN, SMA (male)	101292
GPS antenna	1575.42 MHz, 2 dBi, 3 m RG174 SMA (male), magnetic	101259

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