

MC-MNR 450

450 MHz Router 4-Port



450connect
Whitelist for use in the 450 MHz frequency band



4G LTE Cat 1.bis



LTE 450 MHz



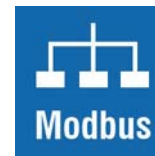
WLAN



GPS Glonass



3x SMA



Modbus



MQTT



IPv6 / IPv4



4 Ethernet RJ45



SFP cage



RS-485



2in/2out



Dual-SIM



IEC-60870-5-104



E1 approval



ECE-R118

MC-MNR 450 Router 4-Port

Technical Data

General	Description	Part-No.
Type	LTE450 MHz Cat 1.bis Router	194523
Dimensions (W x H x D)	44 x 105 x 124 mm	
Weight	approx.500 g	
Supply voltage	8 to 30V DC	
Operation temperature	-40°C to +70°C	
Housing	Aluminum	
Protection class	IP20	
Mounting	DIN rail, wall mounted	
Module plugged	Quectel EG912N-EN mPCIe	
Mobile		
Supporting networks	LTE Bands: B1/B3/B5/B7/B8/B20/B28/B31/B72 GSM: B3/B8	
Transmission rates LTE-FDD	Max 10 Mbps (DL) / 5 Mbps (UL)	
Transmission rates EDGE	Max 236.8 kbp (DL) / 236.8 kbps (UL)	
Transmission rates GPRS	Max 85.6 kbp (DL) / 85.6 kbps (UL)	
Antenna connections	3x SMA (female)	
Controller, Memory and OS		
Prozessor	ARMv8, 64bit, Cortex A5x, Quad Core, up to 2GHz	
DRAM	LPDDR4 2 GByte	
eMMC	16 GByte	
Internet protocol	IPv4, IPv6	
Interfaces		
Power	Plug-in screw-type terminal	
Ethernet	4x RJ45 10/100/1000 base-t	
SFP	SFP cage for standard SFP modules	
Analog Input	2x 0 - 30 V + 2x 4 - 20 mA	
RS-485	on IO-Interface	
USB	3.0	
LED	8 Status LEDs + 2 LEDs for each Ethernet sockets	
WLAN	2.4 GHz	
GNSS	GPS, GLONASS (or BeiDou) and QZSS	
External Flash	1x Micro-SD-Card slot	
Internal slots	M.2, mPCIe	
SIM	2x nano SIM (eSIM optional)	
Digital Output	4x 0 - 30 V (open drain)	
Digital Input	4x 0..30 V (optional ignition power logic for vehicle use)	
Other properties		
Operating System	OpenWRT 24 (free programmable and configurable embedded Linux system)	
Standards and regulations		
Electromagnetic compatibility	Conformity with EMC Directive 2014/30/EU (CE-Marking), optional: ECE R10	
Security	TPM2.0, Secure boot, watchdog, development process according IEC 62443-4.1, Open VPN, IPsec	
Delivery includes		
t.b.a.		

Mistakes and changes are reserved.

MC-MNR 450 Router 4-Port Accessories

Accessories		Part-No.
Power supply	Mount Adapter EU	100909
DIN mount	Clip-in for DIN Rail, 40mm, aluminium	100813
Bracket	Bracket made of spring steel	194316
Wall bracket	Aluminium, raw, laser-cut & folded	200026
WLAN / LTE antenna	4G/3G/2G/WLAN, SMA (male)	101292
GPS adhesive antenna	GPS, 3m RG-174, SMA (male)	163027
450 MHz adhesive antenna	for Smart Metering / Smart Grid, 2m RG-178 SMA (male)	193508
5G/LTE/450 MHz Combi antenna	5G/4G/3G/2G/450 MHz, 5m CS29, SMA (male)	193606
450 MHz Magnetic base antenna	450-470 MHz, 2m C23 LowLoss cable, SMA (male), with two whips	194344

Mistakes and changes are reserved.



193508



194344



MC MNR 5GA with
wall bracket 200026



MC MNR 5GA with
bracket 194316



MC MNR 5GA with
DIN mount 100813



193606

Whitelist Router & Smart Grid Geräte (Cat.1) MC Technologies MC-MNR 450 4Port

Hersteller	MC Technologies GmbH, Germany
Modell/Produktfamilie	MC-MNR 450 4Port
LTE-Gerätekategorie	Cat.1
HW-Version	V 1.04
OS-Version	OpenWrt 24.10.0 (r28427-6df0e3d02a)
Modem-Mgt-SW-Version	OpenWrt 24.10.0 (r28427-6df0e3d02a)
Modem-FW-Version	AAR03A08M16_01.303.01.303
Whitelisting-Prozess-Version	2.0
Freigabedatum	20.02.2026



Whitelisting und Anwendungshinweis:

Whitelisted. Entspricht Planungsanforderungen (bis -120 dBm RSRP). Nutzung entsprechend des jeweils gültigen 450connect-Kundenvertrags und den 450connect-Praxisleitfäden.

Unter anspruchsvollen Funkversorgungsverhältnissen (z.B. in bestimmten Gebäude-Innenbereichen) wird die Verwendung von Antennen mit durchschnittlichem isotropem Gewinn > +1 dBi empfohlen.

Für das Release Management der Geräte im operativen Betrieb kommen die folgenden Tools zum Einsatz: INSIDE M2M IoT-Plattform „M2MGate V“

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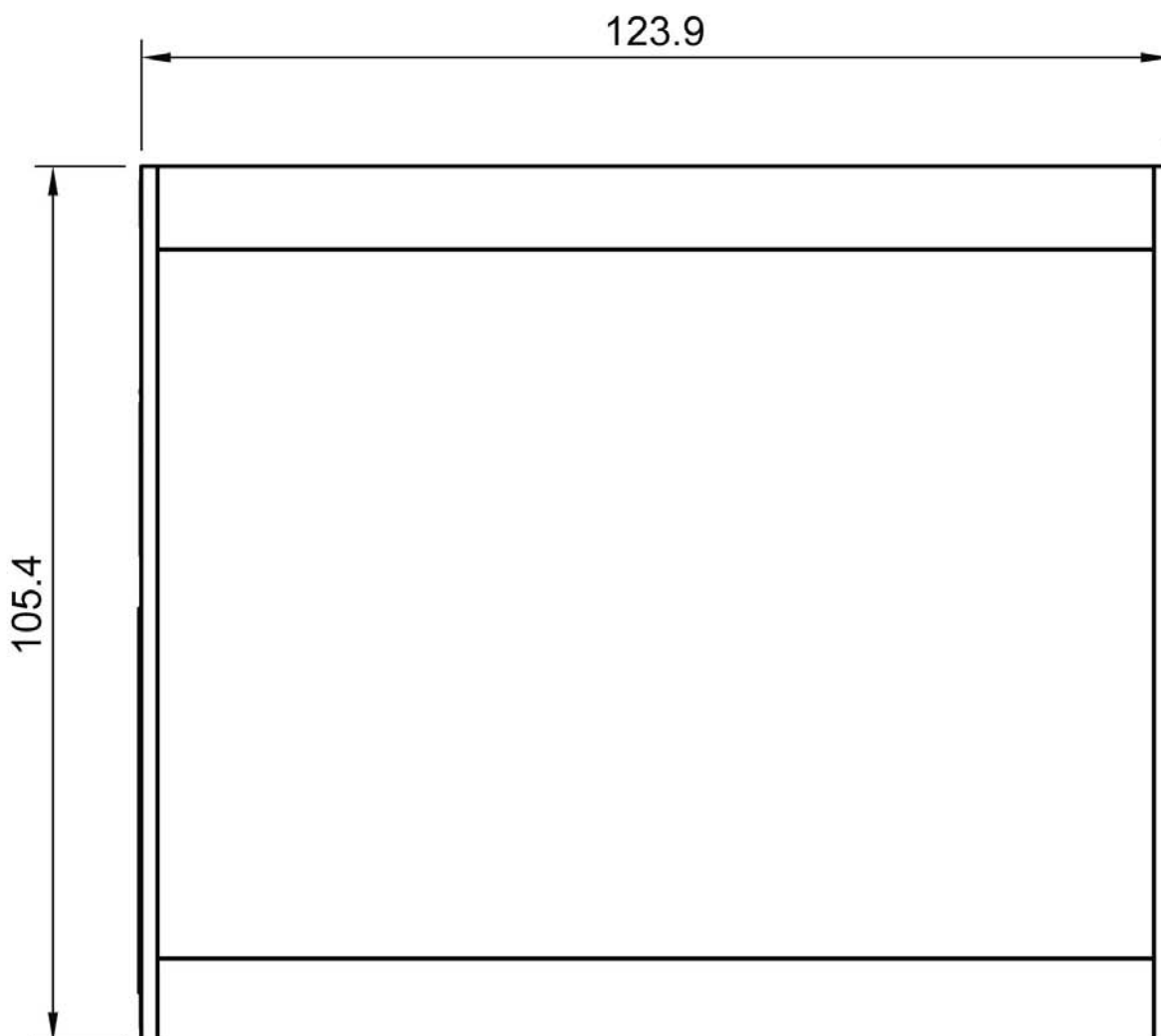
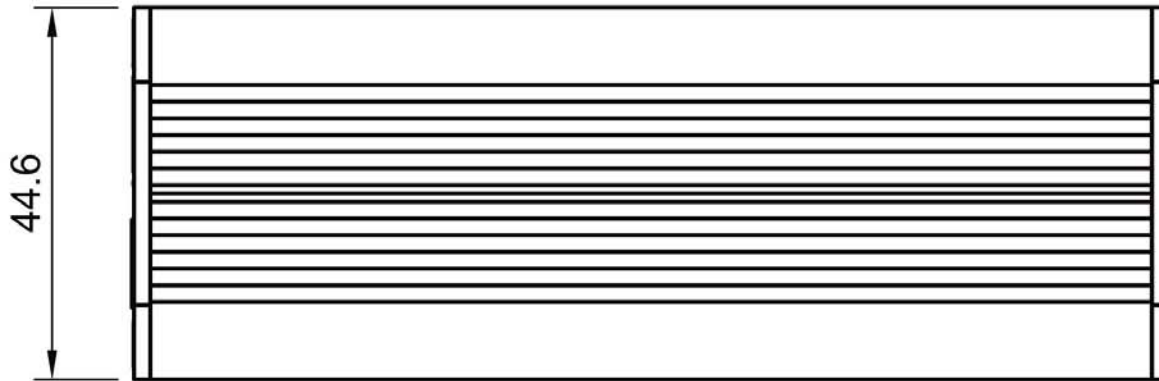
Mitglied der



V1.7 – 27.02.2026

450connect Whitelist für Kundenendeinrichtungen – Vertraulich (S3) für Kunden der 450connect

MC-MNR 450 Router 4-Port Dimensions



MC-MNR 450 Router 4-Port Connections

