

MC-MNR 5GA

5G Router



preliminary



5G Sub-6 GHz



4G LTE



2G GSM



WLAN



GPS Glonass



up to 8x SMA
(2x MIMO)



Dual-SIM



E1 approval
(optional)



2 Ethernet RJ45
(optional 4)



2x M12
(optional RJ45)



USB 2.0



RS-485



2in/2out



Audio

MC-MNR 5GA Router

Technical Data

General	Description	Part-No.
Type	5G Router	194110
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 +75°C (optional -40°C to 85°C)	
Housing	Aluminum	
Protection class	IP20	
Mounting	DIN rail, wall mounted	
Module plugged	Quectel RM500U-EA / Quectel EC21-E mPCIe	
Mobile 5G		
Supporting networks	UMTS Bands: B1/ 2/ 5/ 8 LTE Bands: B1/ 2/ 3/ 4/ 5/ 7/ 8/ 20/ 28/ 38/ 40/ 41/ 66 5G Bands: 5G NR NSA: n1/ 3/ 7/ 28/ 38/ 40/ 41/ 77/ 78 5G NR SA: n1/ 3/ 5/ 7/ 8/ 20/ 28/ 38/ 40/ 41/ 66/ 77/ 78 DL 4 x 4 MIMO: n1/ 3/ 7/ 28 / 38/ 40/ 41/ 66/ 77/ 78 UL 2 x 2 MIMO: n38/ 40/ 41/ 77/ 78 DL 2 x 2 MIMO: n5/ 8/ 20	
max. Data Rates 5G SA Sub-6	2 Gbps (DL)/ 1 Gbps (UL)	
max. Data Rates 5G NSA Sub-6	2.6 Gbps (DL)/ 650 Mbps (UL)	
max. Data Rates LTE	600 Mbps (DL)/ 150 Mbps (UL)	
max. Data Rates UMTS	42.2 Mbps (DL)/ 11 Mbps (UL)	
Antenna connections	8x SMA (female)	
Controller, Memory and OS		
Prozessor	ARMv8, 64bit, Cortex A5x, Quad Core, up to 2GHz	
DRAM	LPDDR4 2 GByte	
eMMC	16 GByte	
Interfaces		
Power	Plug-in screw-type terminal	
Ethernet	2x RJ45 + 2x M12 X-coded 10/100/1000 Base-T(X) acc. IEEE 802.3	
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	LC76GPBMD	
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)	
Audio	M8 microphone input and speaker output for calls via LTE module	
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	
Delivery includes		
t.b.a.		

Mistakes and changes are reserved.

MC-MNR 5GA Router

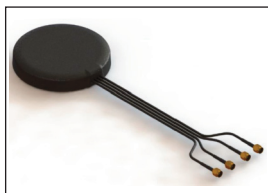
Accessories

Accessories		Part-No.
DIN mount	Clip-in for DIN Rail	t.b.a.
5G/LTE Puck Antenna	5G/4G/3G/2G, 3m RG-174, 1x SMA (male)	193874
5G/LTE MIMO x 4 SMA Antenna	5G/4G/MIMO/3G/2G, 4 x 3m LMR100, 4x SMA (male)	194062
5G/LTE MIMO wall antenna	5G/4G/MIMO/3G/2G, 2 x 2m RG-174, 2x SMA (male)	193600
5G/LTE Directional antenna	5G/4G/3G/2G, 10m LMR-195, SMA (male)	193863
Internal MiMo 4G/5G Antenna	5G/4G, 2x 3m CS32, 214 x 77 x 16.5 mm, 2x SMA (male)	194157
5G/LTE building MIMO antenna	5G/4G/3G/2G/WLAN, 2x 5m CS29, 2x SMA (male)	162531
5G MIMO/GPS roof antenna	5G MIMO/4G/3G/2G/GPS, 5 x 3m RG-174, 5x SMA (male)	193845
5G 4x4 MIMO roof antenna	5G/4G/MIMO/3G/2G, 4 x 0,3m RG-174, 4x SMA (m)	193840
5G/LTE Portable antenna	5G/4G/3G/2G, 198 mm rod length, SMA (male)	161012

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193874



194062



193600



193863



194157



162531



193845



193840



161012