

MC2LX8

Industrial cellular router (3G/4G/5G) + WiFi 6 (802.11ax)

Description:

The MC2LX8 connects components that communicate via Ethernet LAN or serial interfaces to other networks via WLAN or 5G (LTE). The typical usage area for the MC2L-5G is machine-to-machine communication, locally over WLAN as well as remotely connected over mobile networks (5G).

Properties:

Hardware:

Processor: iMX8 (NXP)
Memory: 512MByte DDR4-RAM and 4GB Flash
WiFi: 802.11ax for 2.4 + 5 GHz WiFi 6
Cellular: 5G/4G/3G multi-mode
Navigation: Multi-constellation GNSS
Ethernet: 2 x Gigabit LAN interface
Serial: 1 x RS232 or RS485 serial interface
USB: 1 x USB2 Port also for interface extensions
IO: 1 x relay switch (dependent on power connector)
1 x aux input (dependent on power connector)
Power supply: 10-60V or 802.3af PoE via LAN Port 1
Housing: Robust aluminum housing with various mounting options

Functions:

Configuration via website, REST-API
or by using the MC-Config program.
Different bridge modes to connect the LAN clients.
- NAT
- Single Client NAT
- Single Client Cloning
- Level 2 Bridge
- MWLC Mode
WEP, 802.11i WPA-WPA2-WPA3-AES-TKIP-PSK
WPA Enterprise 802.1x PEAP LEAP TLS TTLS
Certificate management for authentication via 802.1x
SCEP (Simple Certificate Enrollment Protocol)
MQTT
Connects worldwide to 3G, 4G or 5G networks
Precedence selection to prefer LAN over LTE and vice versa
Serial-Client via TCP or UDP



Device Options:

Mounting:

- 1) side mounting brackets (MC2LX8-SL...)
- 2) DIN rail mounting clip (MC2LX8-SC...)

Power supply connection:

- 1) 5 pol. M12 connector (MC2LX8-Sx-M12)
 - always with relay
- 2) 8pol terminal block (MC2LX8-Sx-WK8)
 - always with relay and auxiliary input
- 3) 3pol M8 connector (MC2LX8-Sx-M8)

Antenna connector WLAN:

- 1) 2 x RP-SMA

Antenna connector 5G:

- 1) 4 x LTE antenna SMA

Serial Interface:

- 1) 1 x RS232 (Standard)
- 2) 1 x RS485
- 3) 1 x RS422

Technical data:

Specification:	
Ethernet	2 x 10/100/1000 MBit Auto MDI/MDIX
Serial	1 x RS232, 300-460,8 KBit/s, RTS, CTS, DSR, DTR or RS485
USB	1 x USB 2.0 to connect printers or USB adapter with various other interfaces
Relay	1 x change-over switch max 1A@24V, max 125VAC
AUX-Input	1 x galv. isolated 10 – 72V
Antenna connectors	2 x RPSMA (WiFi) 3 x SMA (5G + GPS)
Sim card slot	1 x Standard/Mini-SIM slot
Power supply	10 – 60 VDC or 802.3af PoE via the LAN Port
Energy consumption	max 10W (4.5W idle)
Operating temperature range	0-60°C
Dimensions	105x125x35mm
Weight	ca. 500g

WLAN-Interface:																					
Technologies	802.11 ax WLAN (2.4 + 5 GHz Band) IEEE 802.11-Standards: a/b/g/n/ac/ax Features: OFDMA, 1024QAM, MU-MIMO, TPC/DFS, TWT Frequency: 2,4 GHz, 5 GHz Bluetooth: 5.0																				
Antennas:	2 Antennas (2T2R MIMO)																				
Encoding	WEP (64,128bit) + TKIP/AES																				
Security	802.11i WPA(2+3) – PSK 802.1x EAP-PEAP, -TLS, -TTLS, -LEAP																				
Fast Roaming	802.11r + 802.11k																				
Channels	2,4GHz ETSI 1-13, USA/Canada 1-11 5.0GHz ETSI + USA/Canada 24 (36 – 165) (U-NII-1 + UNII-2A + U-NII-2C+U-NII-3)																				
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Order codes:

	Option	Order code
Housing		
	Housing with mounting brackets	MC2LX8-SL....
	Housing with DIN-rail-clip	MC2LX8-SC....
Power supply connection		
	M12 connector	MC2LX8-Sx-M12....
	8pol. Weidmüller terminal block	MC2LX8-Sx-WK8....
	M8 connector	MC2LX8-Sx-M8....
	DC-Jack	MC2LX8-Sx-J....
IO-Option	optional, if not included in connector	
	Relay	MC2LX8-Sx-....-REL
	Aux-Input	MC2LX8-Sx-....-INP
Serial	Standard: 1 x RS232	MC2LX8-Sx-....
	1 x RS422	MC2LX8-Sx-xx-RS422
	1 x RS485	MC2LX8-Sx-xx-RS485
Antenna Options LTE	Standard: 3 x LTE	MC2LX8-Sx-....
	1 x GPS antenna connector	MC2LX8-Sx-....-GPS