

Industrial WiFi 6e (802.11ax) Network Bridge

Description:

The MC2X8-A connects components that communicate via Ethernet LAN or serial interfaces to other networks via WLAN. The typical usage area for the MC2L8-A is machine-to-machine communication, locally over WLAN.

Properties:

Hardware:

Processor: iMX8 (NXP)
Memory: 512MByte DDR4-RAM and 4GB Flash
WiFi: 802.11ax for 2.4 + 5 GHz WiFi6 + 6GHz WiFi6e
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: 12-60V 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
- VPN (openVPN, Wireguard or IPSec)
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-Client
Serial-Client via TCP or UDP or MQTT
ipv6 + ipv4



Device Options:

Mounting:

- 1) side mounting brackets (MC2X8-A-SL...)
- 2) DIN rail mounting clip (MC2X8-A-SC...)

Power supply connection:

- 1) 5 pol. M12 connector (MC2X8-A-Sx-M12)
 - always with relay
- 2) 8pol terminal block (MC2X8-A-Sx-WK8)
 - always with relay and auxiliary input

Antenna connector WLAN:

- 1) 2 x RP-SMA

Serial Interface:

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

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)
Power supply	12 – 60 VDC or 802.3af PoE via the LAN Port
Energy consumption	max 7W (4W idle)
Operating temperature range	0-60°C
Dimensions	105x125x35mm
Weight	ca. 500g

WLAN-Interface:	
Technologies	802.11 ax WLAN (2.4 + 5 + 6GHz 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, 6GHz
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) 6.0GHz 5.945 - 6.425 MHz (EU)