MC1

802.11a/b/g/n WLAN Ethernet & Serial Adapter

Description:

The MC1 provides network connections between devices equipped with Ethernet ports or serial interfaces and wireless LAN networks. The typical usage area for the MC1 is the broad field of industrial WLAN applications in machine-to-machine communication. This includes mobile installations such as forklifts or AGV's.

Properties:

Hardware:

Processor board with ARM® Cortex®-A9 Core Memory: 128MByte DDR-RAM and 4GB Flash 802.11a/b/g/n for 2.4 + 5 GHz WLAN, Data rate up to 300 MBit/s Gigabit LAN interface RS232 or RS485 or RS422 serial interface USB2 Port also to interface extension 1 x relay switch 1 x aux input Power supply 10-72V or over PoE (LAN) Robust aluminum housing with various mounting options Largely mechanical and functional compatibility to the earlier models WLX + ESCG.

Functions:

Configuration via the website 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 (transparent tunnel mode) Certificate management for authentication via 802.1x SCEP (Simple Certificate Enrollment Protocol) Fast-Roaming 802.11r Serial-Client via TCP or UDP

Device Options:

Mounting:

side mounting brackets
DIN rail mounting clip

Power supply connection:

- 1) 5 pol. M12 connector
- 2) 8pol terminal block
- 3) 3pol M8 connector

Antenna connector:

1) 2 x RP-SMA (standard) 2) 1 or 2 TNC or RPTNC

Serial Interface:

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



MC1-SC

Technical data:

Specification:		
Ethernet	1 x 10/100/1000 MBit Auto MDI/MDIX	
Serial	1 x RS232, 300-460,8 KBit/s, RTS, CTS, DSR, DTR or RS485 (RS422)	
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 (optional TNC or RPTNC)	
Power supply	10 – 72VDC or 802.3af PoE via the LAN Port	
Energy consumption	<= 5W (3W typical)	
Operating temperature range	0-60°	
Dimensions	105x125x35mm	
Weight	ca. 400g	

WLAN-Interface:				
Technologies	802.11 a/b/g/n WLAN (2.4 + 5 GHz Band)			
Antennas:	2 Antennas (2T2R MIMO)			
Encoding	WEP (64,128bit) + TKIP	WEP (64,128bit) + TKIP/AES		
Security	802.11i WPA(2) – PSK 802.1x EAP-PEAP, -TLS	802.11i WPA(2) – PSK 802.1x EAP-PEAP, -TLS, -TTLS, -LEAP		
Channels		802.11b/g/n ETSI 1-13, USA/Canada 1-11 802.11a/n ETSI 19, USA/Canada 12		
Data rates	Mode	Data rate		
	802.11b:	1, 2, 5.5 , 11Mbps		
	802.11g / a	6, 9, 12, 18, 24, 36, 48, 54Mbps		
	802.11n (20MHz)	1Nss: max. 72.2Mbps 2Nss: max. 144.4Mbps		
	802.11n (40MHz)	1Nss: max. 150Mbps 2Nss: max. 300Mbps		
Transmit power	802.11b/g 17 dBm 802.11gn 16 dBm	802.11a 15 dBm 802.11an 15 dBm		



Order codes:

	Option	Order code
Housing		
	Housing with mounting brackets	MC1-SL
	Housing with DIN-rail-clip	MC1-SC
Power supply connection		
	M12 connector	MC1-Sx-M12
	8pol. Weidmüller terminal block	MC1-Sx-WK8
	M8 connector	MC1-Sx-M8
IO-Option		
	Relay	MC1-Sx-xx-REL
	Aux-Input	MC1-Sx-xx-INP
Serial	Standard: 1 x RS232	
	1 x RS422	MC1-Sx-xx-RS422
	1 x RS485	MC1-Sx-xxRS485
Antenna Options	Standard: 2 x RPSMA	
	1 or 2 TNC Antenna connector(s)	MC1-Sx-xx-1(2)TNC
	1 or 2 RPTNC Antenna connector(s)	MC1-Sx-xx-1(2)RTNC

