Industrial Ethernet Media Converter

MCW-211 EX

- Easy to install and use
  - Purpose built DIN rail casing with integral clip
  - Port auto-negotiation and polarity detection
  - Transparent to industrial Ethernet protocols
- Designed for use in harsh industrial applications
  - Dual 10 – 57 VDC power input
  - Total galvanic isolation
  - ATEX Zone 2 – Ex II 3 G Ex nA IIC T4 Gc (Nemco tested)
- Robust for long service life
  - 540,000 hours MTBF to MIL-HDBK-217K
  - –25 to +70°C (–13 to +158°F) with no moving parts
  - Industrial EMC, shock and vibration testing
- Diagnostic fault indication and legacy connectivity
  - Link fault forwarding
  - Diagnostic LEDs
  - DIP switches to lock port parameters for old equipment

Part 15

EN 61000-6-2 Industrial Immunity

EN 61000-6-3 Residential Emission

The MCW-211 EX is an unmanaged media converter designed for easy use in heavy duty industrial applications. The MCW-211 EX transparently converts between 10/100Base-TX and 100Base-FX. Several transceiver options are available supporting, LC, SC or ST fibre connectors. The unit supports 802.1Q long packets which allows all standard industrial Ethernet protocols to to be used.

The MCW-211 EX is designed for use in industrial applications and so has dual power inputs for 10 to 57 VDC operation. Total galvanic isolation between the power supply and TX port helps to avoid ground loop currents and hence provide ultra reliable connections. (External) Testing has been performed (by Nemco) to ensure the MCW-211 EX can be used in potentially explosive atmospheres as defined in the ATEX directive.

Only industrial grade components are used which gives the MCW-211 EX an MTBF of 540,000 hours and ensures a long service life. A wide operating temperature range of –25 to +70°C (–13 to +158°F) can be achieved with no moving parts. The MCW-211 EX has been tested both by Westermo and external test houses to meet many EMC, isolation, vibration and shock standards, all to the highest levels suitable for heavy industrial environments.

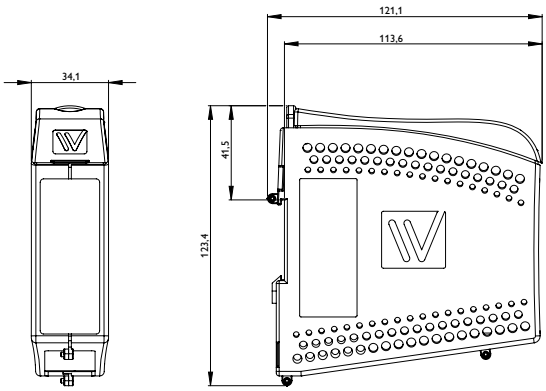
Easy to understand LED indicators provide simple diagnostics if network problems arise. The link fault forward function helps to transfer indication of media failure onto connected ports to ensure that the MCW-211 EX can be used in resilient network structures. Data rate and flow control can be locked by DIP switch which can eliminate problems with old legacy Ethernet equipment that is unable to support auto negotiation.

Ordering Information

Art.no	Description
3645-5050	MCW-211 EX-MM-LC2
3645-5001	MCW-211 EX-MM-SC2
3645-5010	MCW-211 EX-MM-ST2
3645-5020	MCW-211 EX-SM-SC15
3645-5030	MCW-211 EX-SM-LC15
3645-5040	MCW-211 EX-SM-LC40
3125-0001	PS-30, Power supply, DIN mounted (Accessories)

Specifications MCW-211 EX

Dimensional drawing



Dimension W x H x D	34 x 123 x 121 mm
Weight	0.25 kg
Degree of protection	IP 21

Power	
Operating voltage	10 to 60 VDC
Rated current	200 mA @ 12 VDC 100 mA @ 24 VDC 50 mA @ 48 VDC

Interfaces	
Ethernet TX	1 x RJ-45, 10 Mbit/s or 100 Mbit/s
Ethernet FX	1 x LC, SC or SM fibre, 100 Mbit/s

Temperature	
Operating	–25 to +70°C (–13 to +158°F)
Storage & Transport	–40 to +70°C (–40 to +158°F)
Maximum surface temperature	135°C (275°F) (temperature class T4)

Agency approvals and standards compliance	
EMC	EN 61000-6-2, Immunity industrial environments
	EN 61000-6-4, Emission industrial environments
Marine	DNV Standard for Certification no. 2.4[1]
EX	EN 60079-0 and EN 60079-15[2]
Note	[1] Applicable only for 3645-0030, 3645-0040 , 3645-0050 (MCW-211-SM-LC15, MCW-211-SM-LC40, MCW-211-MM-LC2) [2] Applicable only for MCW-211EX series