Serial Adapter

EDW-100 EX

- Global approval for hazardous area use
  - IECEx, International EX standard
  - ATEX 94/9/EC, EU directive
- Easy to install and use
  - Purpose built DIN rail casing with integral clip
  - Extensive LED and Telnet diagnostics
  - Web and DIP switch settings
- Designed for use in harsh industrial applications
  - Dual 10 – 60 VDC power input
  - Total galvanic isolation & transient protection
  - ATEX Zone 2 – Ex II 3 G Ex nA IIC T4 Gc
- Robust for long service life
  - 1,000,000 hours MTBF to MIL-HDBK-217K
  - –25 to +70°C (–13 to +158°F) with no moving parts
  - Industrial EMC, shock and vibration testing
- Comprehensive legacy to IP solution
  - UDP, TCP client and TCP server with packing algorithm
  - Modbus TCP to RTU/ASCII gateway
  - Special modes for hardware handshake and resilience

CE FC Part 15 Ex IEC IECEx EN 50121-4 Railway Trackside EN 61000-6-1 Residential Immunity EN 61000-6-2 Industrial Immunity EN 61000-6-4 Industrial Emission

The EDW-100 EX is an ATEX certified serial to Ethernet converter designed to allow RS-232, RS-422 and RS-485 serial devices to communicate via TCP/IP Ethernet networks. DIP switches are used for configuration of RS-422/485 as well as for Ethernet port settings; the password protected web interface is used for all other settings. Diagnostic information can be accessed via a Telnet session with more basic information offered on LEDs.

The EDW-100 EX is designed for use in heavy duty industrial applications. The wide power range, galvanic isolation, transient protection and the design of the termination and fail safe guarantees communication in the worst environments.

Only industrial grade components are used which gives the EDW-100 EX an MTBF of 1,000,000 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 EDW-100 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 and rail trackside applications.

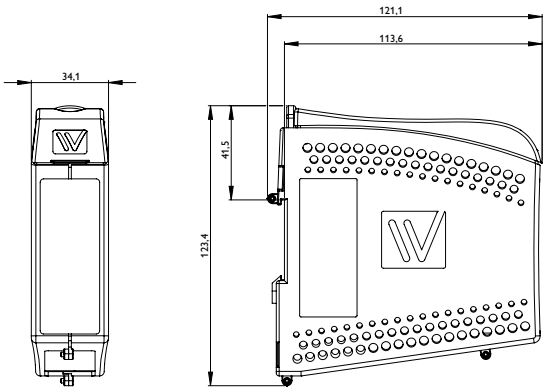
The EDW-100 EX supports UDP, TCP client and TCP server connections between units or to a PC virtual COM port. It also has an array of special modes, including Single Client Mode, Dual TCP Connection, DSR Connection, RST on TCP Closure, RTS Control, Break Signalling and Last Calling allowing the unit to be used in a wide range of complex applications. The Modbus TCP gateway implementation in the EDW-100 EX supports Modbus RTU and Modbus ASCII in both master and slave modes.

Ordering Information

Art.no	Description
3616-5020	EDW-100 EX
3125-0001	PS-30, Power supply, DIN mounted (Accessories)

Specifications EDW-100 EX

Dimensional drawing



Dimension W x H x D	34 x 123 x 121 mm (1.33 x 4.84 x 4.76 in)
Weight	0.2 kg
Degree of protection	IP 21

Power	
Operating voltage	10 to 60 VDC
Rated current	250 mA @ 12 VDC 125 mA @ 24 VDC 63 mA @ 48 VDC

Interfaces	
RS-422/485	1 x 4-position detachable screw terminal, 300 bit/s to 115.2 kbit/s
RS-232	1 x 9-pin D-sub, 300 bit/s to 115.2 kbit/s
Ethernet	1 x RJ-45, 10 Mbit/s or 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 50121-4, Railway signalling and telecommunications apparatus
	EN 61000-6-1, Immunity for residential, commercial and light-industrial environments
	EN 61000-6-2, Immunity industrial environments
	EN 61000-6-4, Emission industrial environments
	IEC 62236-4, Railway signalling and telecommunications apparatus
Safety	EN 60950, IT equipment
IECEx	Explosive atmosphere IEC 60079-0, General requirements IEC 60079-15, Equipment protected by type of protection "n"
ATEX	Explosive atmosphere IEC 60079-0, General requirements IEC 60079-15, Equipment protected by type of protection "n"