

# Ring / Multidrop FIBRE Converter RS-422/485

## ODW-730-F2

- Numerous fibre configuration options
  - Up to 120 km distance
  - BiDi support (single fibre)
  - Multimode and singlemode SFPs in single ring
- Designed for use in industrial applications
  - Dual 10 V to 60 VDC power input
  - 500,000h MTBF according to MIL HDBK-217K
  - Compact housing with integral DIN rail clip
- Unique solutions for serial RS-485/422 protocols
  - Asynchronous and synchronous support to 1.5 Mbit/s
  - Integral selectable failsafe and termination
  - Half- and full duplex bus mode (Y/V mode)
- Extensive resilient fibre optic network solutions
  - Ring recovery < 1 ms
  - Latency < 0.5 ms allowing 250 units per ring
  - Galvanically isolated fault status output



**EN 50121-4**  
Railway Trackside

**EN 61000-6-1**  
Residential Immunity

**EN 61000-6-2**  
Industrial Immunity

**EN 61000-6-3**  
Residential Emission

**EN 61000-6-4**  
Industrial Emission

The ODW-730-F2 has been designed to allow the use of fibre optic cables on RS-422/485 networks. The design allows the use of a range of Westermo verified SFP (Small Form Pluggable) transceivers which can provide solutions with, for example, only a single fibre or distances up to 120 km. Both multidrop networks and redundant rings can be formed using a mixture of transceiver types.

This unit has been designed for industrial use where the requirement is for a long and reliable service life, in a harsh environment. To ensure this reliable operation we manufacture using the highest quality components.

The ODW-730 draws on Westermo's many years of knowledge of serial protocols and can be used on both synchronous and asynchronous data streams. The switch selectable termination circuit saves the need for external terminating resistors.

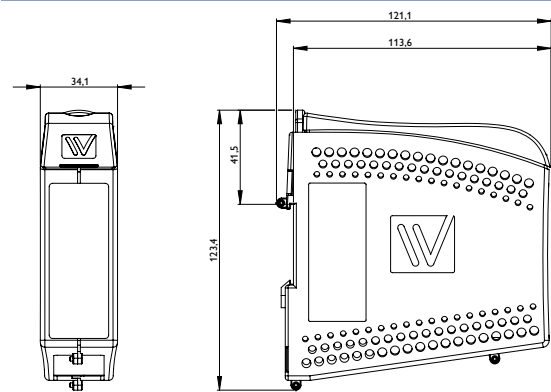
Large ring networks can be created to provide network resilience to guarantee system functionality, even if a cable is damaged. The ring recovery time ensures that the network devices are not aware of the failure. The fault contact provides a method to communicate network failures.

### Ordering Information

Art.no	Description
3651-0732	ODW-730-F2
3125-0001	PS-30, Power supply, DIN mounted (Accessories)

# Specifications ODW-730-F2

## Dimensional drawing



Dimension W x H x D	35 x 121 x 119 mm (1.37 x 4.76 x 4.68 in)
Weight	0.26 kg
Degree of protection	IP21

Power	
Operating voltage	10 to 60 VDC and 20 to 30 VAC
Rated current	400 mA @ 12 V 200 mA @ 24 V 100 mA @ 48 V

Interfaces	
Status	1 x Detachable screw terminal
RS-422/485	1 x 300 bit/s – 1.5 Mbit/s
FX (Fibre)	2 x LC Duplex or LC Simplex

Temperature	
Operating	–40 to +60°C (–40 to +140°F)
Storage & Transport	–40 to +60°C (–40 to +140°F)

Agency approvals and standards compliance	
EMC	EN 61000-6-1, Immunity residential environments
	EN 61000-6-2, Immunity industrial environments
	EN 61000-6-3, Emission residential environments
	EN 61000-6-4, Emission industrial environments
	EN 50121-4, Railway signalling and telecommunications apparatus
	IEC 62236-4, Railway signalling and telecommunications apparatus
	DNV Standard for Certification no. 2.4
Safety	UL/CSA/IEC/EN 60950-1, IT equipment