Ring / Multidrop Fibre Converter RS-422/485

ODW-630-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

CE FC Part 15 c UL us LISTED

EN 61000-6-2 Industrial Immunity
EN 61000-6-3 Residential Emission
EN 61000-6-4 Industrial Emission
EN 50121-4 Railway Trackside

The ODW-630-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-630 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.

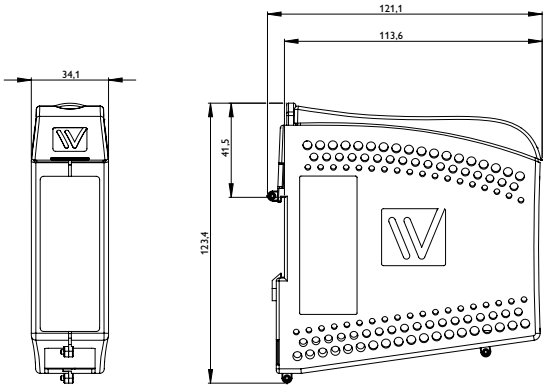
The ODW-630 is a base units used together with Westermo SFP transceivers. With this opportunity it is possible to configure all of the previous variants that had mounted transceivers as well as many new combinations. Different transceiver options are described in the SFP transceiver data sheet.

Our new concept with base unit and transceivers is 100% compatible with all previous variants.

Ordering Information	
Art.no	**Description**
3651-0632	ODW-630-F2, Ring / Multidrop Fibre Converter RS-422/485
3125-0001	PS-30, Power supply, DIN mounted (Accessories)

Specifications ODW-630-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	IP 21

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 55022, Emission IT equipment, class A
	EN 55024, Immunity IT equipment
	FCC part 15 Class A
	EN 50121-4, Railway signalling and telecommunications apparatus
	IEC 62236-4, Railway signalling and telecommunications apparatus
Safety	UL/CSA/IEC/EN 60950-1, IT equipment