

# Point-to-Point Fibre Converter RS-422/485

## ODW-630-F1

- ⌘ Numerous fibre configuration options
  - Up to 120 km distance
  - BiDi support (single fibre)
  - Multimode and singlemode SFPs
- ⌘ Designed for use in industrial applications
  - Dual 10 V to 60 VDC power input
  - 500,000h MTBF according to MIL HDBK-217K
  - Galvanically isolated status output
- ⌘ Unique solutions for serial RS-422/485 protocols
  - Data rates to 1.5 Mbit/s
  - Asynchronous and synchronous protocol support
  - Integral selectable failsafe and termination
- ⌘ Simple to use and install
  - Dip switches to set data rate and delay
  - Comprehensive diagnostic LEDs
  - Compact housing with integral DIN rail clip



**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-F1 has been designed to allow RS-422/485 protocols to be transmitted point-to-point over a fibre optic link. 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.

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.

The ODW-630 is simple to install, being small, with a simple integral DIN rail clip. The unit is totally transparent to any data rate so no configuration is needed. The comprehensive LEDs provide a quick and easy way of detecting any network problems that may be encountered.

The ODW-630 is a base unit 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.

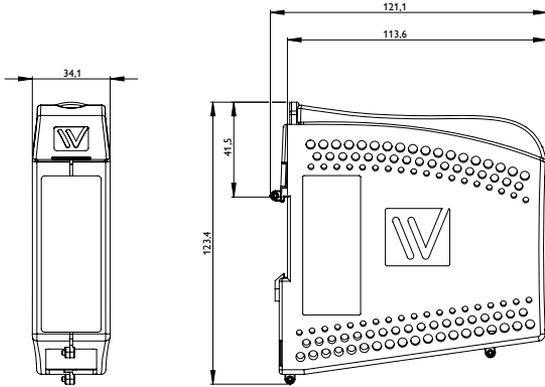
*Our new concept with base unit and transceivers is 100% compatible with all previous variants.*

### Ordering Information

Art.no	Description
3651-0631	ODW-630-F1, Point-to-Point Fibre Converter RS-422/485
3125-0001	PS-30, Power supply, DIN mounted (Accessories)

# Specifications ODW-630-F1

## 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	300 mA @ 12 V 150 mA @ 24 V 75 mA @ 48 V

### Interfaces

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

### Temperature

Operating	-40 to +70°C (-40 to +158°F)
Storage & Transport	-40 to +70°C (-40 to +158°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