



# Product guide 2018

CREATING THE WORLD'S BEST  
INDUSTRIAL NETWORKS

# Industrial Data Communications Heritage

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*Specifications are subject to  
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ment and improvement.*

Westermo was established in 1975. The head office is located 150 km (95 miles) southwest of Stockholm, Sweden. Over the years Westermo has grown with subsidiaries being established in Sweden, Finland, UK, Germany, France, Singapore, Taiwan, North America and Australia and sales partners appointed in over 35 countries worldwide.

The first Westermo data communications product was an RS-232 line driver, the KM-1, that allowed data to be transmitted over great distances using twisted pair cables. Today we still sell a product, the MD-12, that is plug compatible with this device.

In the 1990s, Westermo created the world's first industrial DIN rail mount telephone modem, the TD-22, pioneering remote access solutions for industrial devices like PLCs and HMIs.



# Swedish Engineering Excellence

Westermo provides a full range of data communications solutions for demanding applications in industries that include transport, water and energy markets. Since 1975 we have been at the forefront of technological development and continue to push the limits of what is technically possible.

We offer the highest levels of service to help our customers to select, configure and install the right solution for their needs. Our experience and expertise goes far beyond our own product range, so that regardless of whether your installation is in a substation, water treatment plant or alongside a railway, we understand the specific demands and are able to provide the right advice.

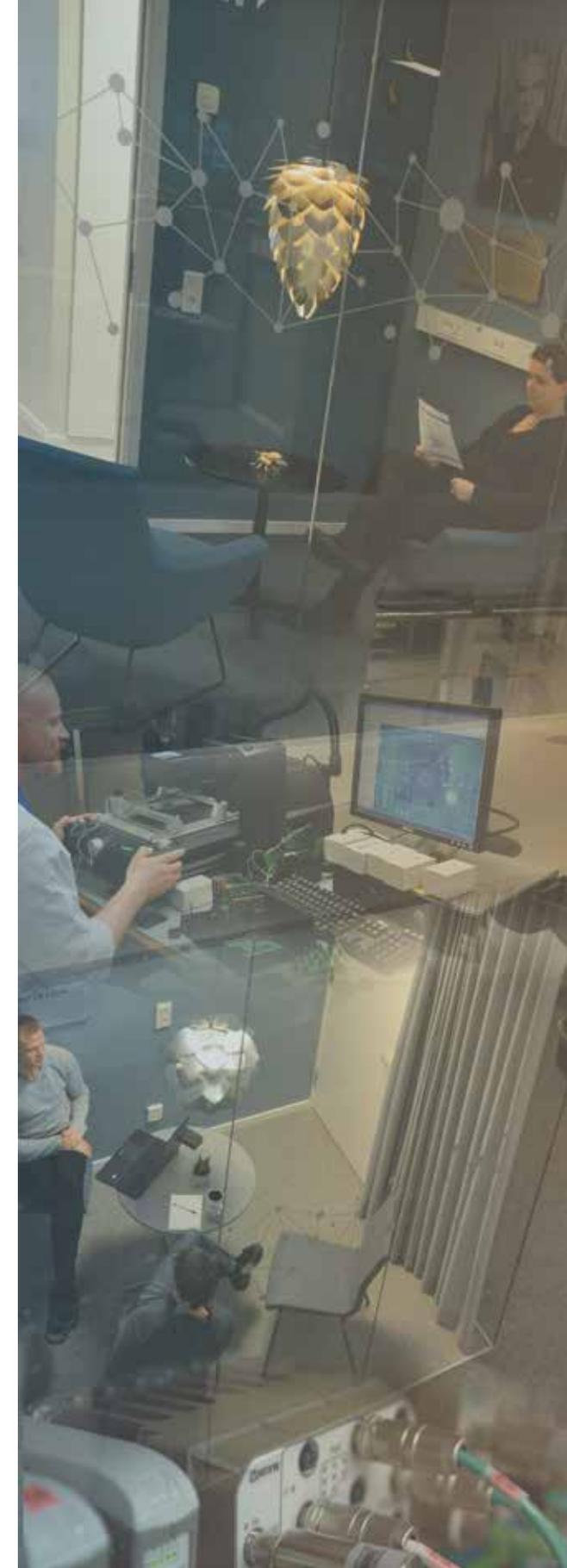
## Made in Sweden

To ensure the highest quality, all Westermo products are manufactured in our own state of the art industrial electronics manufacturing facility in Sweden.

*For more information about products and services from Westermo, please visit our website at [www.westermo.com](http://www.westermo.com)*

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# Ethernet switches

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## Robust Ethernet switches that can withstand all industrial environments

Our industrial Ethernet switches are designed for use in harsh environments and allow you to build cost-effective, reliable, secure networks. Whether you require an unmanaged switch for a point-to-point link, a managed switch for redundancy or a layer 3 switch for network routing, we have the ideal solution, regardless of the environment. Our extensive range of switches and knowledge of the various standards are used in train, railway, energy, utilities and road applications.

# Managed Ethernet Switches

	
Product/Art. no	Description
<b>L105-S1</b> 3643-0210  <b>L105-S1-EX</b> 3643-5210 	<b>Managed Device Server Switch</b> 4 x 10/100 Mbit/s, Ethernet TX, RJ-45 1 x Digital I/O 1 x 50 bit/s to 115.2 kbit/s, RS-232, RJ-45 1 x USB 1 x 2.5 mm jack, console Operating voltage: 19-60 VDC Operating temperature: -40 to +70 °C (-40 to +158 °F)
<b>L106-F2G</b> 3643-0230  <b>L106-F2G-EX</b> 3643-5230 	<b>Managed Ethernet Switch</b> 4 x 10/100 Mbit/s, Ethernet TX, RJ-45 2 x 100/1000 Mbit/s, pluggable connections transceivers supported, Ethernet FX or TX, SFP 1 x Digital I/O 1 x USB 1 x 2.5 mm jack, console Operating voltage: 19-60 VDC Operating temperature: -40 to +70 °C (-40 to +158 °F)
<b>L106-S2</b> 3643-0220  <b>L106-S2-EX</b> 3643-5220 	<b>Managed Device Server Switch</b> 4 x 10/100 Mbit/s, Ethernet TX, RJ-45 1 x Digital I/O 1 x 50 bit/s to 115.2 kbit/s, RS-232, RJ-45 1 x 50 bit/s to 115.2 kbit/s, RS-232 or 50 bit/s to 2 Mbit/s, RS-422/485, RJ-45 1 x USB 1 x 2.5 mm jack, console Operating voltage: 19-60 VDC Operating temperature: -40 to +70 °C (-40 to +158 °F)
<b>L108-F2G-S2</b> 3643-0200  <b>L108-F2G-S2-EX</b> 3643-5200 	<b>Managed Device Server Switch</b> 4 x 10/100 Mbit/s, Ethernet TX, RJ-45 2 x 100/1000 Mbit/s, pluggable connections transceivers supported, Ethernet FX or TX, SFP 1 x Digital I/O 1 x 50 bit/s to 115.2 kbit/s, RS-232, RJ-45 1 x 50 bit/s to 115.2 kbit/s, RS-232 or 50 bit/s to 2 Mbit/s, RS-422/485, RJ-45 1 x USB 1 x 2.5 mm jack, console Operating voltage: 19-60 VDC Operating temperature: -40 to +70 °C (-40 to +158 °F)
<b>L110-F2G</b> 3643-0100  <b>L110-F2G-EX</b> 3643-5100 	<b>Managed Ethernet Switch</b> 8 x 10/100 Mbit/s, Ethernet TX, RJ-45 2 x 100/1000 Mbit/s, pluggable connections transceivers supported, Ethernet FX or TX, SFP 1 x Digital I/O 1 x 2.5 mm jack, console Operating voltage: 19-60 VDC Operating temperature: -40 to +70 °C (-40 to +158 °F)
<b>L110-F2G-12VDC</b> 3643-0110 	<b>Managed Ethernet Switch</b> 8 x 10/100 Mbit/s, Ethernet TX, RJ-45 2 x 100/1000 Mbit/s, pluggable connections transceivers supported, Ethernet FX or TX, SFP 1 x Digital I/O 1 x 2.5 mm jack, console Operating voltage: 9.6-60 VDC Operating temperature: -40 to +74 °C (-40 to +165 °F)

	
Product/Art. no	Description
<b>L205-S1</b> 3643-0215  <b>L205-S1-EX</b> 3643-5215 	<b>Managed Device Server Switch with Routing Functionality</b> 4 x 10/100 Mbit/s, Ethernet TX, RJ-45 1 x Digital I/O 1 x 50 bit/s to 115.2 kbit/s, RS-232, RJ-45 1 x USB 1 x 2.5 mm jack, console Operating voltage: 19-60 VDC Operating temperature: -40 to +70 °C (-40 to +158 °F)
<b>L206-F2G</b> 3643-0235  <b>L206-F2G-EX</b> 3643-5235 	<b>Managed Ethernet Switch with Routing Functionality</b> 4 x 10/100 Mbit/s, Ethernet TX, RJ-45 2 x 100/1000 Mbit/s, pluggable connections transceivers supported, Ethernet FX or TX, SFP 1 x Digital I/O 1 x USB 1 x 2.5 mm jack, console Operating voltage: 19-60 VDC Operating temperature: -40 to +70 °C (-40 to +158 °F)
<b>L206-S2</b> 3643-0225  <b>L206-S2-EX</b> 3643-5225 	<b>Managed Device Server Switch with Routing Functionality</b> 4 x 10/100 Mbit/s, Ethernet TX, RJ-45 1 x Digital I/O 1 x 50 bit/s to 115.2 kbit/s, RS-232, RJ-45 1 x 50 bit/s to 115.2 kbit/s, RS-232 or 50 bit/s to 2 Mbit/s, RS-422/485, RJ-45 1 x USB 1 x 2.5 mm jack, console Operating voltage: 19-60 VDC Operating temperature: -40 to +70 °C (-40 to +158 °F)
<b>L208-F2G-S2</b> 3643-0205  <b>L208-F2G-S2-EX</b> 3643-5205 	<b>Managed Device Server Switch with Routing Functionality</b> 4 x 10/100 Mbit/s, Ethernet TX, RJ-45 2 x 100/1000 Mbit/s, pluggable connections transceivers supported, Ethernet FX or TX, SFP 1 x Digital I/O 1 x 50 bit/s to 115.2 kbit/s, RS-232, RJ-45 1 x 50 bit/s to 115.2 kbit/s, RS-232 or 50 bit/s to 2 Mbit/s, RS-422/485, RJ-45 1 x USB 1 x 2.5 mm jack, console Operating voltage: 19-60 VDC Operating temperature: -40 to +70 °C (-40 to +158 °F)
<b>L210-F2G</b> 3643-0105  <b>L210-F2G-EX</b> 3643-5105 	<b>Managed Ethernet Switch with Routing Functionality</b> 8 x 10/100 Mbit/s, Ethernet TX, RJ-45 2 x 100/1000 Mbit/s, pluggable connections transceivers supported, Ethernet FX or TX, SFP 1 x Digital I/O 1 x 2.5 mm jack, console Operating voltage: 19-60 VDC Operating temperature: -40 to +70 °C (-40 to +158 °F)
<b>L210-F2G-12VDC</b> 3643-0115 	<b>Managed Ethernet Switch with Routing Functionality</b> 8 x 10/100 Mbit/s, Ethernet TX, RJ-45 2 x 100/1000 Mbit/s, pluggable connections transceivers supported, Ethernet FX or TX, SFP 1 x Digital I/O 1 x 2.5 mm jack, console Operating voltage: 9.6-60 VDC Operating temperature: -40 to +74 °C (-40 to +165 °F)

Product/Art. no	Description
<b>RFI-111-F4G-T7G</b> 3641-4315 	<b>Industrial Switch</b> 7 × 10/100/1000 Mbit/s, Gigabit Ethernet TX, RJ-45 4 × 100/1000 Mbit/s, pluggable connections transceivers supported, Ethernet FX or TX, SFP 1 × Digital I/O 1 × Micro USB, console 1 × USB Operating voltage: 16-60 VDC Operating temperature: -40 to +70 °C (-40 to +158 °F)
<b>RFI-119-F4G-T7G</b> 3641-4305 	<b>Industrial Switch</b> 7 × 10/100/1000 Mbit/s, Ethernet TX, RJ-45 8 × 10/100 Mbit/s, Ethernet TX, RJ-45 4 × 100/1000 Mbit/s, pluggable connections transceivers supported, Ethernet FX or TX, SFP 1 × Digital I/O 1 × Micro USB, console 1 × USB Operating voltage: 16-60 VDC Operating temperature: -40 to +70 °C (-40 to +158 °F)
<b>RFI-207-F4G-T3G</b> 3641-4210  <b>RFI-207-F4G-T3G-EX</b> 3641-5210 	<b>Industrial Routing Switch</b> 3 × 10/100/1000 Mbit/s, Ethernet TX, RJ-45 4 × 100/1000 Mbit/s, pluggable connections transceivers supported, Ethernet FX or TX, SFP 1 × Digital I/O 1 × Micro USB, console 1 × USB Operating voltage: 16-60 VDC Operating temperature: -40 to +70 °C (-40 to +158 °F)
<b>RFI-211-T3G</b> 3641-4110  <b>RFI-211-T3G-EX</b> 3641-5110 	<b>Industrial Routing Switch</b> 3 × 10/100/1000 Mbit/s, Ethernet TX, RJ-45 8 × 10/100 Mbit/s, Ethernet TX, RJ-45 1 × Digital I/O 1 × Micro USB, console 1 × USB Operating voltage: 16-60 VDC Operating temperature: -40 to +70 °C (-40 to +158 °F)
<b>RFI-211-F4G-T7G</b> 3641-4310  <b>RFI-211-F4G-T7G-EX</b> 3641-5310 	<b>Industrial Routing Switch</b> 7 × 10/100/1000 Mbit/s, Gigabit Ethernet TX, RJ-45 4 × 100/1000 Mbit/s, pluggable connections transceivers supported, Ethernet FX or TX, SFP 1 × Digital I/O 1 × Micro USB, console 1 × USB Operating voltage: 16-60 VDC Operating temperature: -40 to +70 °C (-40 to +158 °F)

Product/Art. no	Description
<b>RFI-215-F4G-T3G</b> 3641-4200  <b>RFI-215-F4G-T3G-EX</b> 3641-5200 	<b>Industrial Routing Switch</b> 3 × 10/100/1000 Mbit/s, Ethernet TX, RJ-45 8 × 10/100 Mbit/s, Ethernet TX, RJ-45 4 × 100/1000 Mbit/s, pluggable connections transceivers supported, Ethernet FX or TX, SFP 1 × Digital I/O 1 × Micro USB, console 1 × USB Operating voltage: 16-60 VDC Operating temperature: -40 to +70 °C (-40 to +158 °F)
<b>RFI-219-T3G</b> 3641-4100  <b>RFI-219-T3G-EX</b> 3641-5100 	<b>Industrial Routing Switch</b> 3 × 10/100/1000 Mbit/s, Ethernet TX, RJ-45 16 × 10/100 Mbit/s, Ethernet TX, RJ-45 1 × Digital I/O 1 × Micro USB, console 1 × USB Operating voltage: 16-60 VDC Operating temperature: -40 to +70 °C (-40 to +158 °F)
<b>RFI-219-F4G-T7G</b> 3641-4300  <b>RFI-219-F4G-T7G-EX</b> 3641-5300 	<b>Industrial Routing Switch</b> 8 × 10/100 Mbit/s, Ethernet TX, RJ-45 7 × 10/100/1000 Mbit/s, Gigabit Ethernet TX, RJ-45 4 × 100/1000 Mbit/s, pluggable connections transceivers supported, Ethernet FX or TX, SFP 1 × Digital I/O 1 × Micro USB, console 1 × USB Operating voltage: 16-60 VDC Operating temperature: -40 to +70 °C (-40 to +158 °F)
<b>RFI-219-F4G-T7G-F8</b> 3641-4320  <b>RFI-219-F4G-T7G-F8-EX</b> 3641-5320 	<b>Industrial Routing Switch</b> 7 × 10/100/1000 Mbit/s, Gigabit Ethernet TX, RJ-45 4 × 100/1000 Mbit/s, pluggable connections transceivers supported, Ethernet FX or TX, SFP 8 × 100 Mbit/s, pluggable connections transceivers supported, Ethernet FX or TX, SFP 1 × Digital I/O 1 × Micro USB, console 1 × USB Operating voltage: 16-60 VDC Operating temperature: -40 to +70 °C (-40 to +158 °F)

Product/Art. no	Description
<b>RFIR-127-F4G-T7G-AC</b> 3641-4030 	<b>Industrial Switch</b> 7 x 10/100/1000 Mbit/s, Ethernet TX, RJ-45 4 x 100/1000 Mbit/s, pluggable connections transceivers supported, Ethernet FX or TX, SFP 16 x 10/100 Mbit/s, Ethernet FX, RJ-45 1 x Digital I/O 1 x Micro USB, console 1 x USB Operating voltage: 100-240 VAC or 16-60 VDC Operating temperature AC: -40 to +55 °C (-40 to +131 °F) Operating temperature DC: -40 to +70 °C (-40 to +158 °F)
<b>RFIR-127-F4G-T7G-DC</b> 3641-4020	
<b>RFIR-219-F4G-T7G-AC</b> 3641-4015 	<b>Industrial Routing Switch</b> 7 x 10/100/1000 Mbit/s, Ethernet TX, RJ-45 4 x 100/1000 Mbit/s, pluggable connections transceivers supported, Ethernet FX or TX, SFP 8 x 10/100 Mbit/s, Ethernet FX, RJ-45 1 x Digital I/O 1 x Micro USB, console 1 x USB Operating voltage: 100-240 VAC or 16-60 VDC Operating temperature AC: -40 to +55 °C (-40 to +131 °F) Operating temperature DC: -40 to +70 °C (-40 to +158 °F)
<b>RFIR-219-F4G-T7G-DC</b> 3641-4005	
<b>RFIR-227-F4G-T7G-AC</b> 3641-4035 	<b>Industrial Routing Switch</b> 7 x 10/100/1000 Mbit/s, Ethernet TX, RJ-45 4 x 100/1000 Mbit/s, pluggable connections transceivers supported, Ethernet FX or TX, SFP 16 x 10/100 Mbit/s, Ethernet FX, RJ-45 1 x Digital I/O 1 x Micro USB, console 1 x USB Operating voltage: 100-240 VAC or 16-60 VDC Operating temperature AC: -40 to +55 °C (-40 to +131 °F) Operating temperature DC: -40 to +70 °C (-40 to +158 °F)
<b>RFIR-227-F4G-T7G-DC</b> 3641-4025	
<b>RFIR-212-FB</b> 3641-1640 	<b>EN 50155 Backbone Routing Switch</b> 12 x 10/100 Mbit/s, Ethernet TX, M12 Dual by-pass relays 1 x M12 USB configuration plug Operating voltage: 16.8-143 VDC Operating temperature: -40 to +70 °C (-40 to +158 °F)

Product/Art. no	Description
<b>Viper-408</b> 3641-0360 	<b>EN 50155 M12 Switch</b> 8 x 10/100 Mbit/s, Ethernet TX, M12 Operating voltage: 16.8-143 VDC Operating temperature: -40 to +70 °C (-40 to +158 °F)
<b>Viper-408 with E-mark</b> 3641-6360	
<b>Viper-112A</b> 3635-0010 	<b>EN 50155 Switch</b> 12 x 10/100 Mbit/s, Ethernet TX, M12 1 x USB
<b>Viper-212A</b> 3635-0020	1 x console port, RS-232 Operating voltage: 16.8-143 VDC Operating temperature: -40 to +70 °C (-40 to +158 °F)
<b>Viper-112A-T3G</b> 3635-0310 	<b>EN 50155 Gbps Switch</b> 9 x 10/100 Mbit/s, Ethernet TX, M12 3 x 10/100/1000 Mbit/s, Ethernet TX, M12 1 x USB
<b>Viper-212A-T3G</b> 3635-0320	1 x console port, RS-232 Operating voltage: 16.8-143 VDC Operating temperature: -40 to +70 °C (-40 to +158 °F)
<b>Viper-112A-T5G</b> 3635-0610 	<b>EN 50155 Gbps Switch</b> 7 x 10/100 Mbit/s, Ethernet TX, M12 5 x 10/100/1000 Mbit/s, Ethernet TX, M12 1 x USB
<b>Viper-212A-T5G</b> 3635-0620	1 x console port, RS-232 Operating voltage: 16.8-143 VDC Operating temperature: -40 to +70 °C (-40 to +158 °F)
<b>Viper-120A</b> 3635-0910 	<b>EN 50155 Switch</b> 20 x 10/100 Mbit/s, Ethernet TX, M12 1 x USB
<b>Viper-220A</b> 3635-0920	1 x console port, RS-232 Operating voltage: 16.8-143 VDC Operating temperature: -40 to +70 °C (-40 to +158 °F)
<b>Viper-120A-T4G</b> 3635-1210 	<b>EN 50155 Gbps Switch</b> 16 x 10/100 Mbit/s, Ethernet TX, M12 4 x 10/100/1000 Mbit/s, Ethernet TX, M12 1 x USB
<b>Viper-220A-T4G</b> 3635-1220	1 x console port, RS-232 Operating voltage: 16.8-143 VDC Operating temperature: -40 to +70 °C (-40 to +158 °F)

# Unmanaged Ethernet Switches

Product/Art. no	Description
SDW-500-series 3644-xxxx	 <p><b>Industrial Ethernet 5-port Switch</b></p> <p><b>SDW-532</b> 3 × 10/100 Mbit/s, Ethernet TX, RJ-45 2 × 100 Mbit/s, Ethernet FX, LC, SC or ST connector Operating voltage: 9.6-57.6 VDC Operating temperature: -25 °C to +70 °C (-13 °F to +158 °F)</p> <p><b>SDW-541</b> 4 × 10/100 Mbit/s, Ethernet TX, RJ-45 1 × 100 Mbit/s, Ethernet FX, LC, SC or ST connector Operating voltage: 9.6-57.6 VDC Operating temperature: -25 °C to +70 °C (-13 °F to +158 °F)</p> <p><b>SDW-541-F1G-T4G</b> 4 × 10/100/1000 Mbit/s, Ethernet TX, RJ-45 1 × 100/1000 Mbit/s, Ethernet FX, SFP Operating voltage: 9.6-57.6 VDC Operating temperature: -40 to +74 °C (-40 to +165 °F)</p> <p><b>SDW-550</b> 5 × 10/100 Mbit/s, Ethernet TX, RJ-45 Operating voltage: 9.6-57.6 VDC Operating temperature: -25 to +70 °C (-13 to +158 °F)</p> <p><b>SDW-550-T5G</b> 5 × 10/100/1000 Mbit/s, Ethernet TX, RJ-45 Operating voltage: 9.6-57.6 VDC Operating temperature: -40 to +74 °C (-40 to +165 °F)</p>



Product/Art. no	Description
Viper-008 3641-0340	 <p><b>EN 50155 M12 Switch</b> 8 × 10/100 Mbit/s, Ethernet TX, M12 Operating voltage: 16.8-143 VDC Operating temperature: -40 to +70 °C (-40 to +158 °F)</p>
Viper-012 3641-0540	 <p><b>EN 50155 Switch</b> 12 × 10/100 Mbit/s, Ethernet TX, M12 Operating voltage: 16.8-143 VDC Operating temperature: -40 to +70 °C (-40 to +158 °F)</p>

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Product/Art. no	Description		
SDI-541-MM-SC2 3625-0001	 <p><b>5-port Ethernet Fibre Switch</b> 4 × 10/100 Mbit/s, Ethernet TX, RJ-45 1 × 100 Mbit/s, Ethernet FX, Multi-mode 2 km, SC connector 1 × Power/Relay, 4-pin terminal block Operating voltage: 18-32 VDC or 18-27 VAC Operating temperature: -10 to +60 °C (+14 to +140 °F)</p>		
SDI-541-SM-SC30 3625-0010	 <p><b>5-port Ethernet Fibre Switch</b> 4 × 10/100 Mbit/s, Ethernet TX, RJ-45 1 × 100 Mbit/s, Ethernet FX, Single-mode 30 km, SC connector 1 × Power/Relay, 4-pin terminal block Operating voltage: 18-32 VDC or 18-27 VAC Operating temperature: -10 to +60 °C (+14 to +140 °F)</p>		
SDI-550 3625-0050	 <p><b>5-port Ethernet Switch</b> 5 × 10/100 Mbit/s, Ethernet TX, RJ-45 1 × Power/Relay, 4-pin terminal block Operating voltage: 18-32 VDC or 18-27 VAC Operating temperature: -25 to +70 °C (-13 to +158 °F)</p>		
SDI-862-MM-SC2 3625-0110	 <p><b>8-port Ethernet Fibre Switch</b> 6 × 10/100 Mbit/s, Ethernet TX, RJ-45 2 × 100 Mbit/s, Ethernet FX, Multi-mode 2 km, SC connector 1 × Alarm relay, terminal block connector with 1 A @ DC 24 V carry ability Operating voltage: 10-60 VDC Operating temperature: -10 to +70 °C (+14 to +158 °F)</p>		
SDI-862-SM-SC30 3625-0120	 <p><b>8-port Ethernet Fibre Switch</b> 6 × 10/100 Mbit/s, Ethernet TX, RJ-45 2 × 100 Mbit/s, Ethernet FX, Single-mode 30 km, SC connector 1 × Alarm relay, terminal block connector with 1 A @ DC 24 V carry ability Operating voltage: 10-60 VDC Operating temperature: -10 to +70 °C (+14 to +158 °F)</p>		
SDI-880 3625-0100	 <p><b>8-port Ethernet Switch</b> 8 × 10/100 Mbit/s, Ethernet TX, RJ-45 1 × Alarm relay, terminal block connector with 1 A @ DC 24 V carry ability Operating voltage: 10-60 VDC Operating temperature: -25 to +70 °C (-13 to +158 °F)</p>		

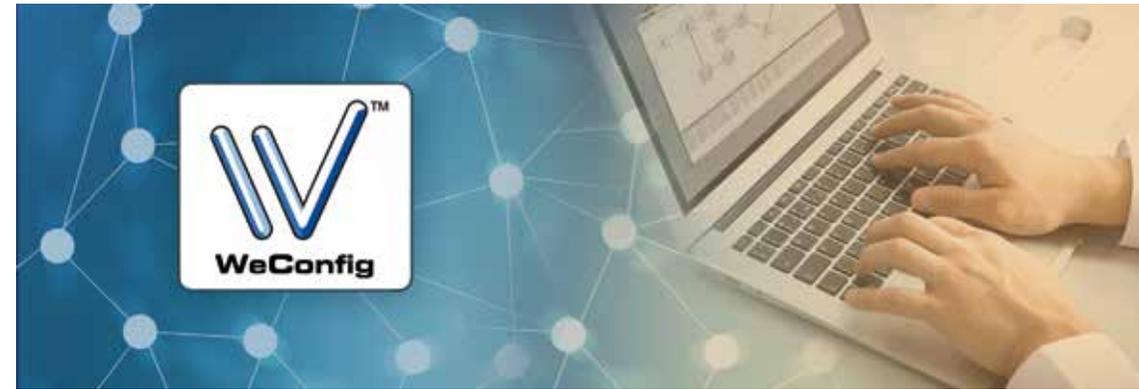
# Managed PoE Ethernet Switches

	
Product/Art. no	Description
<b>Viper-112A-P8-HV</b> 3635-0110  <b>Viper-112A-P8-LV</b> 3635-0210 	<b>EN 50155 PoE Switch</b> 12 x 10/100 Mbit/s, Ethernet TX, M12 (8 with PoE capability) 1 x USB 1 x console port, RS-232 Operating voltage HV: 33.6-143 VDC Operating voltage LV: 16.8-49.4 VDC Operating temperature: -40 to +70 °C (-40 to +158 °F)
<b>Viper-112A-T3G-P8-HV</b> 3635-0410  <b>Viper-112A-T3G-P8-LV</b> 3635-0510 	<b>EN 50155 Gbps PoE Switch</b> 9 x 10/100 Mbit/s, Ethernet TX, M12 (8 with PoE capability) 3 x 10/100/1000 Mbit/s, Ethernet TX, M12 1 x USB 1 x console port, RS-232 Operating voltage HV: 33.6-143 VDC Operating voltage LV: 16.8-49.4 VDC Operating temperature: -40 to +70 °C (-40 to +158 °F)
<b>Viper-112A-T5G-P8-HV</b> 3635-0710  <b>Viper-112A-T5G-P8-LV</b> 3635-0810 	<b>EN 50155 Gbps PoE Switch</b> 7 x 10/100 Mbit/s, Ethernet TX, M12 (8 with PoE capability) 5 x 10/100/1000 Mbit/s, Ethernet TX, M12 1 x USB 1 x console port, RS-232 Operating voltage HV: 33.6-143 VDC Operating voltage LV: 16.8-49.4 VDC Operating temperature: -40 to +70 °C (-40 to +158 °F)
<b>Viper-212A-P8-HV</b> 3635-0120  <b>Viper-212A-P8-LV</b> 3635-0220 	<b>EN 50155 PoE Routing Switch</b> 12 x 10/100 Mbit/s, Ethernet TX, M12 (8 with PoE capability) 1 x USB 1 x console port, RS-232 Operating voltage HV: 33.6-143 VDC Operating voltage LV: 16.8-49.4 VDC Operating temperature: -40 to +70 °C (-40 to +158 °F)
<b>Viper-212A-T3G-P8-HV</b> 3635-0420  <b>Viper-212A-T3G-P8-LV</b> 3635-0520 	<b>EN 50155 Gbps PoE Routing Switch</b> 9 x 10/100 Mbit/s, Ethernet TX, M12 (8 with PoE capability) 3 x 10/100/1000 Mbit/s, Ethernet TX, M12 1 x USB 1 x console port, RS-232 Operating voltage HV: 33.6-143 VDC Operating voltage LV: 16.8-49.4 VDC Operating temperature: -40 to +70 °C (-40 to +158 °F)
<b>Viper-212A-T5G-P8-HV</b> 3635-0720  <b>Viper-212A-T5G-P8-LV</b> 3635-0820 	<b>EN 50155 Gbps PoE Switch</b> 7 x 10/100 Mbit/s, Ethernet TX, M12 (8 with PoE capability) 5 x 10/100/1000 Mbit/s, Ethernet TX, M12 1 x USB 1 x console port, RS-232 Operating voltage HV: 33.6-143 VDC Operating voltage LV: 16.8-49.4 VDC Operating temperature: -40 to +70 °C (-40 to +158 °F)

	
Product/Art. no	Description
<b>Viper-120A-P8-HV</b> 3635-1010  <b>Viper-120A-P8-LV</b> 3635-1110 	<b>EN 50155 PoE Switch</b> 20 x 10/100 Mbit/s, Ethernet TX, M12 (8 with PoE capability) 1 x USB 1 x console port, RS-232 Operating voltage HV: 33.6-143 VDC Operating voltage LV: 16.8-49.4 VDC Operating temperature: -40 to +70 °C (-40 to +158 °F)
<b>Viper-120A-T4G-P8-HV</b> 3635-1310  <b>Viper-120A-T4G-P8-LV</b> 3635-1410 	<b>EN 50155 Gbps PoE Switch</b> 16 x 10/100 Mbit/s, Ethernet TX, M12 (8 with PoE capability) 4 x 10/100/1000 Mbit/s, Ethernet TX, M12 1 x USB 1 x console port, RS-232 Operating voltage HV: 33.6-143 VDC Operating voltage LV: 16.8-49.4 VDC Operating temperature: -40 to +70 °C (-40 to +158 °F)
<b>Viper-220A-P8-HV</b> 3635-1020  <b>Viper-220A-P8-LV</b> 3635-11200 	<b>EN 50155 PoE Switch</b> 20 x 10/100 Mbit/s, Ethernet TX, M12 (8 with PoE capability) 1 x USB 1 x console port, RS-232 Operating voltage HV: 33.6-143 VDC Operating voltage LV: 16.8-49.4 VDC Operating temperature: -40 to +70 °C (-40 to +158 °F)
<b>Viper-220A-T4G-P8-HV</b> 3635-1320  <b>Viper-220A-T4G-P8-LV</b> 3635-1420 	<b>EN 50155 Gbps PoE Switch</b> 16 x 10/100 Mbit/s, Ethernet TX, M12 (8 with PoE capability) 4 x 10/100/1000 Mbit/s, Ethernet TX, M12 1 x USB 1 x console port, RS-232 Operating voltage HV: 33.6-143 VDC Operating voltage LV: 16.8-49.4 VDC Operating temperature: -40 to +70 °C (-40 to +158 °F)
	
Product/Art. no.	Description
<b>PMI-110-F2G</b> 3626-0200 	<b>Managed PoE GigE Switch</b> 8 x 10/100 Mbit/s Ethernet TX, RJ-45, PoE 2 x 10/100/1000 Mbit/s, Ethernet TX or 100/1000 Mbit/s, Ethernet FX, SFP combo ports Operating voltage: 46- 57 VDC Operating temperature: -40 to +70 °C (-40 to +158 °F)

# Unmanaged PoE Ethernet Switches

i-line	
Product/Art. no.	Description
<b>PII-2G</b> 3626-0300 	<b>Industrial 2-Port PoE Injector</b> 2 x 10/100/1000 Mbit/s, Ethernet TX, RJ-45 2 x 10/100/1000 Mbit/s, Ethernet TX, RJ-45, PoE Operating voltage: 46-57 VDC Operating temperature: -40 to +70 °C (-40 to +158 °F)
<b>PSI-660G-24V</b> 3626-0100 	<b>PoE Booster Switch</b> 4 x 10/100 Mbit/s Ethernet TX, RJ-45, PoE 2 x 10/100/1000 Mbit/s, Ethernet TX, RJ-45 Operating voltage: 12-24 VDC Operating temperature: -25 to +60 °C (-13 to +140 °F)
<b>PSI-1010G-24V</b> 3626-0110 	<b>PoE Booster Switch</b> 8 x 10/100 Mbit/s Ethernet TX, RJ-45, PoE 2 x 10/100/1000 Mbit/s, Ethernet TX, RJ-45 Operating voltage: 12-24 VDC Operating temperature: -25 to +60 °C (-13 to +140 °F)
<b>PSI-1010G-48V</b> 3626-0120 	<b>PoE Switch</b> 8 x 10/100 Mbit/s Ethernet TX, RJ-45, PoE 2 x 10/100/1000 Mbit/s, Ethernet TX, RJ-45 Operating voltage: 46-57 VDC Operating temperature: -25 to +70 °C (-13 to +158 °F)



## WeConfig – Networking made easy

WeConfig is a network configuration management tool that makes it easy to configure single or multiple Westermo devices. WeConfig simplifies both the initial installation of a network and ongoing maintenance once commissioned.

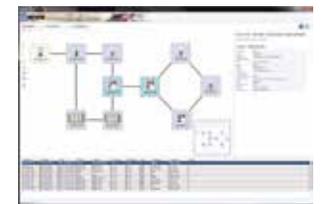
### Easy replacement and reconfiguration

Project files store all associated backup files and network topology information. These enable fast and easy replacement and reconfiguration of a damaged switch in the field. A new device can be installed and will automatically be discovered on the network by WeConfig. The configuration file of the old unit can simply be restored from the project file and the network is repaired.

### Configuration, monitoring and diagnostics

To achieve network resilience, Westermo devices are automatically reconfigured. In the event of a network failure processes running on the network are therefore unaffected. Because processes are not interrupted, the user might not be aware that a network failure has occurred. WeConfig graphically displays the failed link as well as record of the time.

**Download WeConfig for free at [www.westermo.com](http://www.westermo.com)**



- ⌘ Rapid configuration of new network components saving time
- ⌘ Network monitoring and diagnostics
- ⌘ Easy maintenance of network components
- ⌘ Network configuration information readily available



# Extenders

- Point-to-Point Ethernet Extenders
- Managed Network Ethernet Extenders

## Extend your network far beyond the normal limits of Ethernet

Our industrial Wolverine series of industrial Ethernet extenders allow cost-effective Ethernet networks to be created over long distances, at high data rates. The SHDSL technology employed makes it possible to reuse many types of pre-existing cabling which in turn can lead to considerable financial savings. With support for multidrop networks, redundant rings, legacy serial connections and layer 3 routing functions, our range of Ethernet extenders can meet any demand the application requires.

## Point-to-Point Ethernet Extenders

	
Product/Art. no	Description
<b>DDW-120</b> 3621-0110 	<b>Ethernet SHDSL Extender</b> 1 x 10/100 Mbit/s, Ethernet TX, RJ-45 1 x 192 kbit/s to 15.3 Mbit/s, DSL, 2 position detachable screw terminal 1 x 115.2 kbit/s, diagnostic port, 2.5 mm jack Operating voltage: 10-60 VDC Operating temperature: -40 to +70 °C (-40 to +158 °F)
<b>DDW-002-B1</b> 3641-0900 	<b>EN 50155 Ethernet Broadband Bridge</b> 1 x 10/100 Mbit/s, Ethernet TX, RJ-45 1 x 2-wire interface up to 70 Mbit/s, distance up to 300 m Operating voltage: 16.8-143 VDC Operating temperature: -40 to +70 °C (-40 to +158 °F)

## Managed Network Ethernet Extenders

	
Product/Art. no	Description
<b>DDW-142</b> 3642-0300 	<b>Industrial Ethernet Extender</b> 2 x 10/100 Mbit/s, Ethernet TX, RJ-45 2 x 32 kbit/s to 15.3 Mbit/s (30.4 with bonding), SHDSL, 2-position detachable screw terminal 1 x 300 bit/s to 115.2 kbit/s, RS-232, RJ-45 1 x Digital I/O, 4-position detachable screw terminal 1 x USB 1 x 2.5 mm jack, console Operating voltage: 19-60 VDC Operating temperature: -40 to +70 °C (-40 to +158 °F)
<b>DDW-142-EX</b> 3642-5300 	(Same as DDW-142)
<b>DDW-142-12VDC</b> 3642-0400 	<b>Industrial Ethernet Extender</b> 2 x 10/100 Mbit/s, Ethernet TX, RJ-45 2 x 32 kbit/s to 15.3 Mbit/s (30.4 with bonding), SHDSL, 2-position detachable screw terminal 1 x 300 bit/s to 115.2 kbit/s, RS-232, RJ-45 1 x Digital I/O, 4-position detachable screw terminal 1 x USB 1 x 2.5 mm jack, console Operating voltage: 9.6-60 VDC Operating temperature: -40 to +74 °C (-40 to +165 °F)
<b>DDW-142-12VDC-BP</b> 3642-0440 	<b>Industrial Ethernet Extender with bypass relay</b> 2 x 10/100 Mbit/s, Ethernet TX, RJ-45 2 x 32 kbit/s to 15.3 Mbit/s (30.4 with bonding), SHDSL, 2-position detachable screw terminal 1 x 300 bit/s to 115.2 kbit/s, RS-232, RJ-45 1 x Digital I/O, 4-position detachable screw terminal 1 x USB 1 x 2.5 mm jack, console Operating voltage: 9.6-60 VDC Operating temperature: -40 to +74 °C (-40 to +165 °F)

	
Product/Art. no	Description
<b>DDW-142-485</b> 3642-0310 	<b>Industrial Ethernet Extender</b> 2 x 10/100 Mbit/s, Ethernet TX, RJ-45 2 x 32 kbit/s to 15.3 Mbit/s (30.4 with bonding), SHDSL, 2-position detachable screw terminal 1 x 50 bit/s to 2Mbit/s, RS-422/485, 4-position detachable screw terminal 1 x Digital I/O, 4-position detachable screw terminal 1 x USB 1 x 2.5 mm jack, console Operating voltage: 19-60 VDC Operating temperature: -40 to +70 °C (-40 to +158 °F)
<b>DDW-225</b> 3642-0250 	<b>Redundant Ring Ethernet Extender</b> 4 x 10/100 Mbit/s, Ethernet TX, RJ-45 2 x 32 kbit/s to 15.3 Mbit/s, SHDSL, 2-position detachable screw terminal 1 x Digital I/O, 4-position detachable screw terminal 1 x USB 1 x 2.5 mm jack, console Operating voltage: 16-60 VDC Operating temperature: -40 to +70 °C (-40 to +158 °F)
<b>DDW-225-EX</b> 3642-5250 	(Same as DDW-225)
<b>DDW-226</b> 3642-0240 	<b>Ethernet Extender with Serial Support</b> 4 x 10/100 Mbit/s, Ethernet TX, RJ-45 1 x 300 bit/s to 115.2 kbit/s, RS-232, 9-pin D-sub (male) 2 x 32 kbit/s to 15.3 Mbit/s, SHDSL 2-position detachable screw terminal 1 x Digital I/O, 4-position detachable screw terminal 1 x USB 1 x 2.5 mm jack, console Operating voltage: 16-60 VDC Operating temperature: -40 to +70 °C (-40 to +158 °F)
<b>DDW-226-EX</b> 3642-5240 	(Same as DDW-226)
<b>DDW-242</b> 3642-0320 	<b>Advanced Industrial Ethernet Extender</b> 2 x 10/100 Mbit/s, Ethernet TX, RJ-45 2 x 32 kbit/s to 15.3 Mbit/s (30.4 with bonding), SHDSL, 2-position detachable screw terminal 1 x 300 bit/s to 115.2 kbit/s, RS-232, RJ-45 1 x Digital I/O, 4-position detachable screw terminal 1 x USB Operating voltage: 19-60 VDC Operating temperature: -40 to +70 °C (-40 to +158 °F)
<b>DDW-242-12VDC</b> 3642-0420 	<b>Advanced Industrial Ethernet Extender</b> 2 x 10/100 Mbit/s, Ethernet TX, RJ-45 2 x 32 kbit/s to 15.3 Mbit/s (30.4 with bonding), SHDSL, 2-position detachable screw terminal 1 x 300 bit/s to 115.2 kbit/s, RS-232, RJ-45 1 x Digital I/O, 4-position detachable screw terminal 1 x USB Operating voltage: 9.8-60 VDC Operating temperature: -40 to +74 °C (-40 to +165 °F)
<b>DDW-242-485</b> 3642-0330 	<b>Advanced Industrial Ethernet Extender</b> 2 x 10/100 Mbit/s, Ethernet TX, RJ-45 2 x 32 kbit/s to 15.3 Mbit/s (30.4 with bonding), SHDSL, 2-position detachable screw terminal 1 x 50 bit/s to 2 Mbit/s, RS-422/485, 4-position detachable screw terminal 1 x Digital I/O, 4-position detachable screw terminal 1 x USB Operating voltage: 19-60 VDC Operating temperature: -40 to +70 °C (-40 to +158 °F)



# Routers

- Mobile/Cellular/Wireless Routers
- Broadband DSL Routers
- EN 50155 WLAN Routers

## Multiple media solutions for accessing your remote networks

We provide a whole range of routers for use in demanding applications such as railways, water treatment, substation automation, roads and tunnels. We ensure connections to your remote sites are resilient and reliable offering remote access solutions using DSL broadband and wireless 4G technologies. As we know security is of paramount concern, all industrial routers include a powerful firewall to prevent unauthorised access.

## Mobile/Cellular/Wireless Routers

Product/Art. no	Description
<b>MRD-305-DIN</b> 3623-0030 	<b>Industrial M2M/3G Router</b> GSM/GPRS/EDGE/3G/HSPA 2 x 10/100 Mbit/s, Ethernet TX, RJ-45 1 x SIM slot Operating voltage: 10-36 VDC Operating temperature: -40 to +70 °C (-40 to +158 °F)
<b>MRD-405</b> 3623-0501 	<b>Industrial 4G LTE Gateway/Router</b> GPRS/3G/HSUPA/HSDPA/4G LTE 2 x 10/100 Mbit/s, Ethernet TX, RJ-45 1 x SIM slot Operating voltage: 10-36 VDC Operating temperature: -40 to +70 °C (-40 to +158 °F)
<b>MRD-315</b> 3623-0050 	<b>Industrial 3G Router</b> GSM/GPRS/EDGE/3G/HSPA 2 x 10/100 Mbit/s, Ethernet TX, RJ-45 1 x 300 bit/s to 115.2 kbit/s, RS-232, D-sub 1 x SIM slot Operating voltage: 10-60 VDC Operating temperature: -40 to +70 °C (-40 to +158 °F)
<b>MRD-355</b> 3623-0250 	<b>Industrial Mobile Broadband/3G Router</b> GSM/GPRS/EDGE/3G/HSPA 2 x 10/100 Mbit/s, Ethernet TX, RJ-45 1 x 300 bit/s to 115.2 kbit/s, RS-232, D-sub 2 x SIM slot Operating voltage: 10-60 VDC Operating temperature: -40 to +70 °C (-40 to +158 °F)
<b>MRD-455</b> 3623-0401 	<b>Industrial Mobile Broadband/4G Router</b> GSM/GPRS/EDGE/3G/HSPA/4G LTE 2 x 10/100 Mbit/s, Ethernet TX, RJ-45 1 x 300 bit/s to 115.2 kbit/s, RS-232, D-sub 2 x SIM slot Operating voltage: 10-60 VDC Operating temperature: -40 to +70 °C (-40 to +158 °F)

## Broadband DSL Routers

Product/Art. no	Description
<b>BRD-355</b> 3623-0311 	<b>Industrial ADSL/VDSL Router/Modem</b> ADSL/ADSL2/ADSL2+/VDSL2 router 2 x 10/100 Mbit/s, Ethernet TX, RJ-45 1 x 300 bit/s to 115.2 kbit/s, RS-232, DB-9 1 x ADSL, ADSL2/ASDL2+/VDSL2, RJ-11 Operating voltage: 10-48 VDC Operating temperature: -25 to +70 °C (-13 to +158 °F)

## EN 50155 WLAN Routers

Product/Art. no	Description
<b>RT-310</b> 3623-0710 	<b>EN 50155 WLAN Access Point</b> IEEE 802.11n 3x3 MIMO 2 x 10/100/1000 Mbit/s Ethernet TX, M12 X-code Operating voltage: 24 VDC or IEEE 802.3at (PoE) Operating temperature: -40 to +70 °C (-40 to +158 °F)
<b>RT-320</b> 3623-0720 	<b>EN 50155 WLAN Client/Bridge/Access Point</b> IEEE 802.11n 3x3 MIMO 2 x 10/100/1000 Mbit/s Ethernet TX, M12 X-code Operating voltage: 24 VDC or IEEE 802.3at (PoE) Operating temperature: -40 to +70 °C (-40 to +158 °F)
<b>RT-370</b> 3623-0770 	<b>Trackside WLAN Access Point</b> IEEE 802.11n 3x3 MIMO + monitoring antenna 1 x 10/100/1000 Mbit/s Ethernet TX, M12 X-code 1 x Gbit/s Ethernet FX, ODC connector Operating voltage: 100-240 VAC Operating temperature: -40 to +70 °C (-40 to +158 °F)



# Modems

- Fibre Optic Modems
- ISDN Modems
- PSTN/Leased Line Modems
- Short Haul Modems
- Multidrop Modems

## Industrial data modems for the harshest environments

We have a solution for you, whether the need is to communicate through a PSTN or ISDN line, across a private wire or leased line, down a fibre optic cable, or even over GSM/GPRS. Our wide range of industrial modems is designed for use in such demanding applications as railways, water treatment, substation automation, roads and tunnels. All our modems exceed industrial standards and ensure robust and reliable communications.

## Fibre Optic Modems

RS-232/RS-485	
Product/Art. no	Description
<b>ODW-720-F1</b> 3651-0721 	<b>Point-to-Point Fibre Converter, RS-232</b> 1 x Pluggable transceivers, SFP 1 x 300 bit/s to 250 kbit/s, RS-232, D-sub 1 x Detachable status screw terminal Operating voltage: 10-60 VDC or 20-30 VAC Operating temperature: -40 to +70 °C (-40 to +158 °F)
<b>ODW-720-F2</b> 3651-0722 	<b>Ring/Multidrop Fibre Converter, RS-232</b> 2 x Pluggable transceivers, SFP 1 x 300 bit/s to 250 kbit/s, RS-232, D-sub 1 x Detachable status screw terminal Operating voltage: 10-60 VDC or 20-30 VAC Operating temperature: -40 to +60 °C (-40 to +140 °F)
<b>ODW-730-F1</b> 3651-0731 	<b>Point-to-Point Fibre Converter, RS-422/485</b> 1 x Pluggable transceivers, SFP 1 x 300 bit/s to 1.5 Mbit/s, RS-422/485, D-sub 1 x Detachable status screw terminal Operating voltage: 10-60 VDC or 20-30 VAC Operating temperature: -40 to +70 °C (-40 to +158 °F)
<b>ODW-730-F2</b> 3651-0732 	<b>Ring/Multidrop Fibre Converter, RS-422/485</b> 2 x Pluggable transceivers, SFP 1 x 300 bit/s to 1.5 Mbit/s RS-422/485, D-sub 1 x Detachable status screw terminal Operating voltage: 10-60 VDC or 20-30 VAC Operating temperature: -40 to +70 °C (-40 to +158 °F)

PROFIBUS	
Product/Art. no	Description
<b>ODW-710-F1</b> 3651-0711 	<b>Point-to-Point Fibre Converter, PROFIBUS</b> 1 x Pluggable transceivers, SFP 1 x 9 600 bit/s to 12 Mbit/s, PROFIBUS DP (RS-485), D-sub 1 x Detachable status screw terminal Operating voltage: 10-60 VDC or 20-30 VAC Operating temperature: -40 to +70 °C (-40 to +158 °F)
<b>ODW-710-F2</b> 3651-0712 	<b>Ring/Multidrop Fibre Converter, PROFIBUS</b> 2 x Pluggable transceivers, SFP 1 x 9 600 bit/s to 12 Mbit/s, PROFIBUS DP (RS-485), D-sub 1 x Detachable status screw terminal Operating voltage: 10-60 VDC or 20-30 VAC Operating temperature: -40 to +60 °C (-40 to +140 °F)

LONWORKS®	
Product/Art. no	Description
<b>LRW-102 PP</b> 3650-xxxx 	<b>Fibre Optic LON Repeater for TP/FT-10, Point-to-Point</b> 1 x pluggable transceivers, SFP 1 x 78.5 kbit/s, TP/FT-10, detachable screw terminal 1 x Detachable status screw terminal Operating voltage: 10-60 VDC or 20-30 VAC Operating temperature: -40 to +70 °C (-40 to +158 °F)
<b>LRW-102</b> 3650-xxxx 	<b>Fibre Optic LON Repeater for TP/FT-10, Multidrop and Redundant Ring</b> 2 x pluggable transceivers, SFP 1 x 78.5 kbit/s, TP/FT-10, detachable screw terminal 1 x Detachable status screw terminal Operating voltage: 10-60 VDC or 20-30 VAC Operating temperature: -40 to +60 °C (-40 to +140 °F)

## ISDN Modems

Product/Art. no	Description
<b>IDW-90</b> 3620-0001 	<b>Industrial ISDN Modem</b> 1 x 300 bit/s to 115.2 kbit/s, RS-232 1 x 300 bit/s to 115.2 kbit/s, RS-422/485 1 x 300 bit/s to 128.0 kbit/s, ISDN 1 x Digital I/O Operating voltage: 10-60 VDC, 10-42 VAC Operating temperature: +5 to +55 °C (+41 to +131 °F)

## PSTN/Leased Line Modems

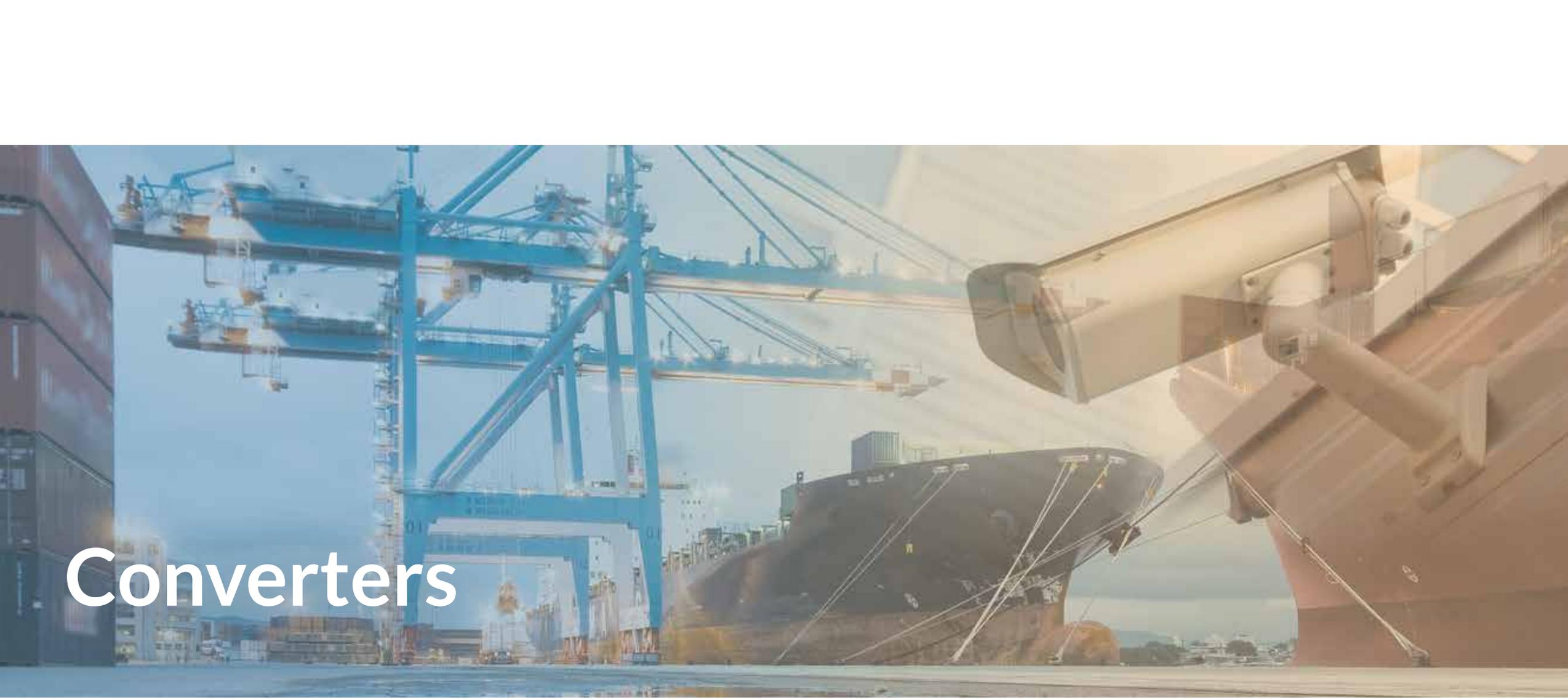
PSTN	
Product/Art. no	Description
<b>TDW-33</b> 3619-0001 	<b>Industrial Telephone Modem</b> 1 x 300 bit/s to 115.2 kbit/s, RS-232 1 x 300 bit/s to 56.7 kbit/s, PSTN Operating voltage: 10-60 VDC or 10-42 VAC Operating temperature: -25 to +70 °C (-13 to +158 °F)
<b>TD-36</b> 3618-xxxx 	<b>Industrial PSTN and Leased Line Modem</b> 1 x 300 bit/s to 115.2 kbit/s, RS-232 1 x 300 bit/s to 33.6 kbit/s, Leased Line 1 x 300 bit/s to 33.6 kbit/s, PSTN Operating voltage: AV: 18-300 VDC, 22-264 VAC, LV: 12-48 VDC, 12-27 VAC Operating temperature: -25 to +70 °C (-13 to +158 °F)
<b>TD-36 485</b> 3618-xxxx 	<b>Industrial backup PSTN and Leased Line Modem</b> 1 x 300 bit/s to 115.2 kbit/s, RS-232 1 x 300 bit/s to 115.2 kbit/s, RS-422/485 1 x 300 bit/s to 33.6 kbit/s, Leased Line 1 x 300 bit/s to 33.6 kbit/s, PSTN Operating voltage: AV: 18-300 VDC, 22-264 VAC, LV: 12-48 VDC, 12-27 VAC Operating temperature: -25 to +70 °C (-13 to +158 °F)
Leased Line	
Product/Art. no	Description
<b>TD-23</b> 3600-xxxx 	<b>Multidrop Modem</b> 1 x 300 bit/s to 115.2 kbit/s, RS-232 1 x 300 bit/s to 115.2 kbit/s, RS-422/485 1 x 300 bit/s to 1200 bit/s, Leased Line 1 x Detachable screw terminal, Relay (optional). Operating voltage: LV: 10-60 VDC 10-30 VAC, HV: 48-300 VDC, 85.5-264 VAC Operating temperature: -25 to +70 °C (-13 to +158 °F)

## Short Haul Modems

RS-232, point-to-point	
Product/Art. no	Description
<b>MD-12</b> 3150-xxxx 	<b>Short-Haul Modem, Point-to-Point</b> 1 x Up to 38.4 kbit/s, RS-232, D-sub 1 x Up to 38.4 kbit/s, RS-232, detachable screw terminal 1 x ±10 mA balanced current loop, detachable screw terminal, Line connection Operating voltage: 12-36 VDC Operating temperature: +5 to +50 °C (+41 to +122 °F) -40 to +70 °C (-40 to +158 °F)

## Multidrop Modems

RS-232, multidrop	
Product/Art. no	Description
<b>LD-02</b> 3156-0001 	<b>Line Sharing Modem</b> 1 x D-sub, up to 38.4 kbit/s, RS-232 1 x Up to 38.4 kbit/s, RS-232, detachable screw terminal 1 x Up to 38.4 kbit/s, RS-422/485, detachable screw terminal 1 x ±10 mA balanced current loop, detachable screw terminal, line connection Operating voltage: 12-36 VDC Operating temperature: +5 to +50 °C (+41 to +122 °F)



# Converters

- Serial Converters/Repeaters
- Current Loop Converters
- Ethernet Media Converters
- Protocol Converters

## Industrial converters for industrial protocols

Our range of converters and repeaters suits a whole host of industrial protocols and communication methods, including Ethernet, RS-232, RS-422, RS-485, PROFIBUS DP, M-Bus and 20 mA current loop. We have a solution which will operate in the harshest industrial environments and provide robust, reliable communications for peace of mind, whether a fibre media converter for an Ethernet link, a serial converter, or a repeater for an RS-485 network is needed.

## Serial Converters/Repeaters

Product/Art. no	Description
<b>EDW-100</b> 3616-0020 	<b>Serial Adapter</b> 1 x 10/100 Mbit/s, Ethernet TX, RJ-45 1 x 300 bit/s to 115.2 kbit/s, RS-232, D-sub 1 x 300 bit/s to 115.2 kbit/s, RS-422/485, detachable screw terminal Operating voltage: 10-60 VDC Operating temperature: -25 to +70 °C (-13 to +158 °F)
<b>EDW-100 EX</b> 3616-5020 	<b>Serial Adapter</b> 1 x 10/100 Mbit/s, Ethernet TX, RJ-45 2 x 300 bit/s to 115.2 kbit/s, RS-232, D-sub Operating voltage: 10-60 VDC Operating temperature: -25 to +70 °C (-13 to +158 °F)
<b>EDW-120</b> 3616-0010 	<b>Serial Adapter</b> 1 x 10/100 Mbit/s, Ethernet TX, RJ-45 2 x 300 bit/s to 115.2 kbit/s, RS-232, D-sub Operating voltage: 10-60 VDC Operating temperature: -25 to +70 °C (-13 to +158 °F)
<b>EDW-120 EX</b> 3616-5010 	<b>Serial Adapter</b> 1 x 10/100 Mbit/s, Ethernet TX, RJ-45 2 x 300 bit/s to 115.2 kbit/s, RS-232, D-sub Operating voltage: 10-60 VDC Operating temperature: -25 to +70 °C (-13 to +158 °F)
<b>RD-48</b> 3153-xxxx 	<b>RS-422/485 Repeater</b> 2 x 300 bit/s to 1.5 Mbit/s, RS-422/485 detachable screw terminal Operating voltage: LV: 9.6-57.6 VDC HV: 85.5-264 VAC or 88-300 VDC Operating temperature: -40 to +70 °C (-40 to 158 °F)
<b>MDW-45</b> 3617-0xxx 	<b>RS-422/485 Converter</b> 1 x 300 bit/s to 115.2 kbit/s, RS-232, D-sub 1 x 300 bit/s to 115.2 kbit/s, RS-422/485, detachable screw terminal Operating voltage: LV: 9.6-57.6 VDC, HV: 85.5-264 VAC or 88-300 VDC Operating temperature: -40 to +70 °C (-40 to 158 °F)

## Current Loop Converters

Product/Art. no	Description
<b>MD-21</b> 3151-xxxx 	<b>20 mA Current loop converter</b> 1 x Up to 19.2 kbit/s, RS-232, D-sub or detachable screw terminal 1 x Up to 19.2 kbit/s, 20 mA current loop, detachable screw terminal Operating voltage: AC: 207-264 VAC, 103-132 VAC, DC: 12-36 VDC, 36-55 VDC Operating temperature: +5 to +50 °C (+41 to 122 °F)

## Ethernet Media Converters

Product/Art. no	Description
<b>MCW-211</b> 3645-0xxx 	<b>Industrial Ethernet Media Converter</b> 1 x 10/100 Mbit/s, Ethernet TX 1 x 100 Mbit/s, Ethernet FX Operating voltage: 10-60 VDC Operating temperature: -25 to +70 °C (-10 to +158 °F)
<b>MCW-211-F1G-T1G</b> 3645-2001 	<b>Industrial Ethernet Gigabit Media Converter</b> 1 x 100/1000 Mbit/s, Ethernet TX, RJ-45 1 x 100/1000 Mbit/s, Ethernet FX, SFP Operating voltage: 9.6-57.6 VDC Operating temperature: -40 to +74 °C (-40 to +165 °F)

### i-line

Product/Art. no	Description
<b>MCI-211G</b> 3624-0001 	<b>Gigabit Ethernet Media Converter</b> 1 x 10/100/1000 Mbit/s, Ethernet TX, RJ-45 1 x 1000 Mbit/s, pluggable transceivers, SFP Operating voltage: 12-48 VDC Operating temperature: -25 to +70 °C (-13 to +158 °F)
<b>MCI-422-MM-SC2</b> 3624-0100 	<b>2-channel Ethernet to Fibre Media Converter</b> 2 x 10/100 Mbit/s, Ethernet TX, RJ-45 2 x 100 Mbit/s fibre port, multi-mode 2 km, SC connector Operating voltage: 10-60 VDC Operating temperature: -25 to +75 °C (-13 to +167 °F)
<b>MCI-422-SM-SC30</b> 3624-0110 	<b>2-channel Ethernet to Fibre Media Converter</b> 2 x 10/100 Mbit/s, Ethernet TX, RJ-45 2 x 100 Mbit/s fibre port, single-mode 30 km, SC connector Operating voltage: 10-60 VDC Operating temperature: -25 to +75 °C (-13 to +167 °F)

## Protocol Converters

M-Bus Converter	
<b>AD-01</b> 3612-0001 	<b>M-Bus adapter</b> 1 x Up to 9600 bit/s, RS-232, D-sub or detachable screw terminals 2 x Up to 9600 bit/s, RS-232, detachable screw terminals 2 x Up to 9600 bit/s, detachable screw terminals, M-Bus slave Operating voltage: 207-253 VAC Operating temperature: 0 to +50 °C (+32 to +122 °F)



# Accessories

- Optical Transceivers
- Power Supplies/Adapters
- Backup Device
- Factory Reset Plug
- Cables and Antennas

## Applying the finishing touches to your industrial application

As well as industrial data communications devices, Westermo can also supply a range of vital accessories to provide a complete solution. Whether the application requires an industrial rated power supply, optical transceivers for use with our many fibre optic devices, or cables and antennas for a wireless application, Westermo has it covered.

## Optical Transceivers

Westermo offers a wide selection of Small Form Pluggable (SFP) transceivers. The selection of transceivers is available in a variety of models offering transmission ranges from 2 km to 120 km (1.2 mi to 75 mi) over fibre. The CX transceiver allows SFP ports to be used to connect an Ethernet RJ-45 cable. Contact Westermo for detailed information.

Product		Description
Single Mode Transceivers		Single Mode Transceivers are available in a variety of models. Transmission capacity from 100 Mbit to 1 Gbit and distances from 15 to 120 km (9.3 to 74.6 mi).
Multi Mode Transceivers		Multi Mode Transceivers are available in a variety of models. Transmission capacity from 100 Mbit to 1 Gbit and distances from 550 m to 60 km (1805 ft to 37.3 mi).
Bi-directional Transceivers		Bi-Di Transceivers are available in a variety of models. 100 Mbit transmission capacity and distances from 2 km to 60 km. (1.24 mi to 37.3 mi).
CX Transceiver		CX transceivers link an SFP port to a copper-based network, using a standard RJ-45 connection 1 Gbit transmission capacity and 100 m (328 ft) distance.

## Power Supplies/Adapters

Westermo provides a set of industrially approved power supplies complying with many mayor safety approvals. The most common power supplies, PS-30 and PS-100, come in a DIN-mounted housing and can operate in a extended temperature range.

Product/Art. no		Description
PS-30 3125-0001		<b>Power supply, DIN-rail</b> Output: DC 24-28V/30 W PSU Input: 85-264 VAC, 85-375 VDC
PS-100/48 3125-0050		<b>Power supply DIN-rail, PoE Ready PSU</b> Output voltage: 48-56 VDC *preset to: 48 V $\pm$ 0.5% @ 2.1 A Input: AC 100-120/220-240 V (Auto Select), 47-63 Hz (AC 85-132 V/AC 184-264 V, DC 220-375 V)

## Backup Device

The USB-M12 is a configuration backup device designed to meet the full requirements of the rail vehicle market.

This device can be used with the Viper 212, Viper 112 and RFR-12-FB, and allows the configuration of the switch to be saved. The device can then be left attached to the switch for easy maintenance exchange of units. Alternatively, the device allows configurations to be updated by simply plugging it in to the unit and repowering.

Product/Art. no		Description
USB M12 plug IP67 3641-0190		Electrical specification: USB v1.1 Data rate: Up to 480Mbit/s Connection: M12 A-coded male Memory size: 16 Mbyte.

# Cables

Special cables for reading diagnostics, antennas, radio, fibre and Ethernet are available in a variety of lengths and jacketing options. Please contact Westermo for further information.

Product/Art. no		Description
<b>Diagnostic cable</b> 1211-2027		Cable for diagnostic DDW-120 and RedFox console port to USB
<b>M12 cables</b>		M12 - M12 In length, 1 m, 5 m and 15 m (3.28 ft, 16.4 ft and 49.2 ft)
<b>M12-RJ45 cables</b>		M12 - RJ-45 In length, 1 m, 5 m and 15 m (3.28 ft, 16.4 ft and 49.2 ft)
<b>Power cables</b>		M12 In length, 1.5 m and 5 m (4.92 ft and 16.4 ft)
<b>Radio cables</b> RG213		Cables for antennas In length, 3 m, 5 m, 7 m, 10 m and 15 m (9.84 ft, 16.4 ft, 23 ft, 32.8 ft and 49.2 ft)



## Westermo quality and approvals

Westermo designs and manufactures robust data communication devices for harsh environments. We supply products that provide the communication infrastructure for control and monitoring systems, derived from proven commercial technology. These products are used in mission critical solutions, where commercial grade products are not sufficiently resilient.

To ensure the highest quality products, Westermo has a state-of-the-art industrial electronics manufacturing facility in Sweden. To maximise the reliability of the product, testing is carried out at many stages of the manufacturing process.

- ⚙ Manufacturing to IPC-A-610 under ISO9001-2008 QMS
- ⚙ Solder Paste Inspection and Automated Optical Inspection
- ⚙ X-ray examination and PCB testing
- ⚙ Functional testing
- ⚙ Burn-in testing to EN 50155





## WeOS – Westermo Operating System

Westermo delivers resilient network solutions through its WeOS operating system, which is at the heart of our range of robust hardware platforms.

WeOS provides an extensive suite of IP networking standards allowing resilient and flexible networks to be created. Fast recovery times and highly reliable solutions can be achieved even in very complex networks. WeOS also provides multiple layers of security to provide protection against cyber-attacks at the network edge.

### Simple and flexible configuration

Made Easy is at the core of the WeOS development, which is why we ensure our intuitive command-line interface is logical and our web interface is simple to use.

Download the latest version of WeOS at [www.westermo.com](http://www.westermo.com)



## WeConnect – Secure remote access

WeConnect is a networking tool that enables secure remote connections to the network edge. Strong encryption techniques make it possible to remotely access any device on the network using a PC, smartphone or tablet. This allows the network to be managed from anywhere in the world, resulting in significant time and cost savings.

### Easy set up

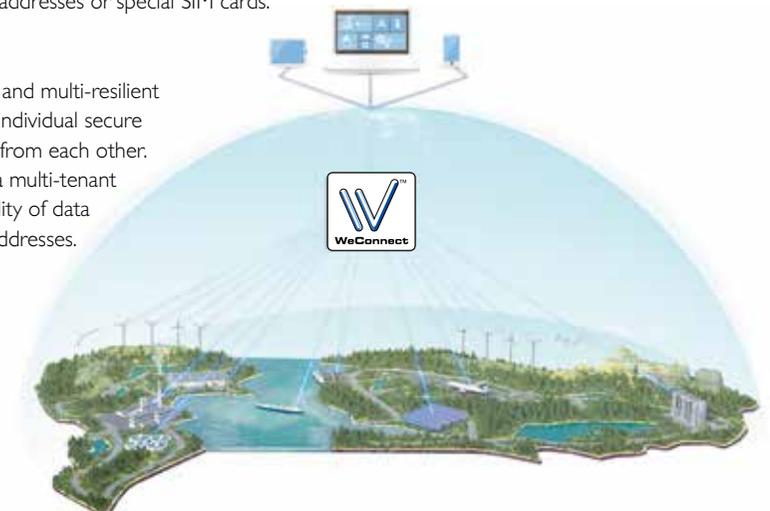
WeConnect works with any type of internet connection and there are no limits to the type of media used including ADSL, VDSL2, fibre, cellular or even satellite. WeOS products connect to WeConnect automatically and there is no need for public IP-addresses or special SIM cards.

### Reliable connectivity

WeConnect is a very scalable and multi-resilient solution, designed to provide individual secure networks completely isolated from each other. WeConnect is therefore not a multi-tenant solution, removing the possibility of data leakage or restrictions on IP-addresses.

Contact Westermo to find out more.

- ⌘ Secure remote access to the network edge
- ⌘ All that is needed is a connection to the internet
- ⌘ Designed to solve common industrial networking problems
- ⌘ Reliable connectivity when needed





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