

Witness Extr for On-board

ABLE TO TRAVEL LIGHT

With an ambient temperature range of -40° to 70°C , there is no need for extra 'garment' when installing this unit.

HOTLINE INTO PROCESS CONTROL

A serial console port allows you to talk to the 'engine' room without interfering with Ethernet traffic.



CRAWLING IN CONFINED SPACES?

Our engineers left no stone unturned in the search for a space optimized design. They succeeded without compromising the distance between the connectors, resulting in one of the most compact and energy efficient designs on the market.

GET READY FOR A BUMPY RIDE!

Depending on the vehicle, even a 'straight' track might not feel smooth. That's why the design is 10g shock and vibration resistant.



eme Evolution

Environments



AN EVOLVED SKELETON

Since the connector threading is integrated in the housing, it removes the need for separate connector chassis parts, which in turn decreases the risk of loose parts.



Scale 1:1



WHAT'S THIS BUTTON FOR?

Our experience has made us aware of issues with re-configuration in the field. This is why we developed a configuration backup on a IP65 USB-stick in case of configuration error or replacement.



IT'S ALIVE!

Even though the unit is fully IP65 rated, the unit actually 'breathes' through a Gore-Tex membrane to prevent condensation built up by climatic day/night cycling.



A product range to meet every demand

Westermo provides a full range of data communication solutions for such demanding applications as railways, aeronautics, defence, water treatment, substation automation, roads and tunnels. The staff at Westermo can provide the highest levels of service and technical support to help our customers to choose, configure and install the best solution for each specific application requirement. Our knowledge goes far beyond our own product range; we have a unique competence regarding your environment whether it is on a train, in an aeroplane, on the seabed or in a substation. To ensure a close relationship with the customer, Westermo has a local presence in more than 35 countries. The Westermo product line includes more than one thousand different types and versions of our modems, switches, routers, time servers and converters.



Managed and unmanaged ultra slim M12 switch

The 8-port Viper was the Westermo first generation vehicle switch with real-time properties for critical applications. The IP 65 sealed metal case and rugged M12 front connectors makes it robust and allows for the surrounding air temperature to be between -40 to +70°C (-40°F to +158°F). There are no sensitive or fragile components, hardening the product against shock and vibration making these units suitable for rolling stock usage. The power supply operates over a wide input range from 24 to 110VDC.



- ⌘ **Solutions to fit different applications**
 - Managed and unmanaged versions
- ⌘ **Designed for extreme environments**
 - MTBF- 800,000 hours
- ⌘ **Externally tested**
and fully verified to EN50155
 - Delta Labs reports
- ⌘ **Designed for tight spaces**
 - Ultra thin design





WeOS powered Robust 12-port Ethernet M12 switch

The Viper-12 is a rugged Ethernet switch designed for applications with severe operating conditions and extreme environments. With an ultra robust design, sealed to IP65 and vibration resistant to military standards these units are ideal for situations where mechanical stress, moisture, condensation, dirt or continuous vibrations could adversely affect the function of standard Ethernet switches.

Fully approved for onboard rolling stock, these units can be deployed in trains, trams, busses, mining trucks, army vehicles and drilling rigs.



- ⌘ One model for worldwide deployment
 - single unit 24–110 VDC +/- 40% to EN50155

- ⌘ Designed for extreme environments
 - MTBF 900,000 hrs

- ⌘ Externally tested and fully verified to EN50155

- Delta Labs reports

- ⌘ Comprehensive management features

- WeOS™ operating system



EN 61000-6-2
Industrial Immunity

EN 61000-6-4
Residential Emission

EN 50155
On Board Rail

EN 50121-4
Railway Trackside



Train Switch with dual by-pass relay

The RedFox-R12 is a rugged Ethernet switch designed for applications with severe operating conditions and enhanced resilience demands. With an ultra robust design, vibration resistant to military standards and a dual failsafe bypass relay these units are ideal for situations where mechanical stress, moisture, condensation, dirt or continuous vibrations could adversely affect the function of standard Ethernet switches. Fully approved for onboard rolling stock, these units can be deployed in trains, trams, busses, mining trucks, army vehicles and drilling rigs.



- ⌘ One model for worldwide deployment
 - single unit 24–110 VDC +/- 40% to EN50155

- ⌘ Resilience for extreme environments

- Dual bypass relay to mitigate powerless car scenario

- ⌘ Externally tested and fully verified to EN50155

- Delta Labs reports

- ⌘ Comprehensive management features

- WeOS™ operating system

