Unmanaged EN 50155 Switch
Viper-008

⁜ Compact basic rail-approved Ethernet switch
- Fully EN 50155 compliant
- Single model 24 – 110 VDC power range
- 8 × 100 Mbit/s Ethernet ports

⁜ Externally tested and verified to EN 50155
- Surge resistance and isolation
- Magnetic field immunity & conducted emission
- Shock and vibration

⁜ Designed for long life and extreme operational environments
- IP65 anti-condensation GORE-TEX® membrane
- Ambient temperature –40°C (–40°F) to +70°C (+158°F)
- Integrated M12 threading and extremely high MTBF, 1,289,000 hours

⁜ Design and production testing to match requirements for train control
- Post production testing exceeding EN 50155 mandatory requirement
- Isolation test on all units
- Manufactured according to IPC-A-610D class2

CE

EN 50121-4	**EN 50155**	**EN 61000-6-1**	**EN 61000-6-2**	**EN 61000-6-3**	**EN 61000-6-4**	**EN 45545-2**
Railway Trackside	On Board Rail	Residential Immunity	Industrial Immunity	Residential Emission	Industrial Emission	Fire Protection

The Viper-008 is a rugged unmanaged Ethernet switch designed for applications with severe operating conditions and extreme environments. The Viper-008 meets the EN 50155 standard for electronic equipment used in railway applications. The super slim and extra robust housing is sealed to IP65 and together with an MTBF (Mean Time Between Failure) calculated to more than a 100 years makes these units ideal for situations where mechanical stress, moisture, condensation, dirt or continuous vibrations could adversely affect the function of standard Ethernet switches.

The unit is well prepared for use in harsh industrial environments. The IP65 sealed metal case and rugged M12 front connectors of the unit makes it robust and allows temperatures from –40 to +70°C (–40 to +158°F).
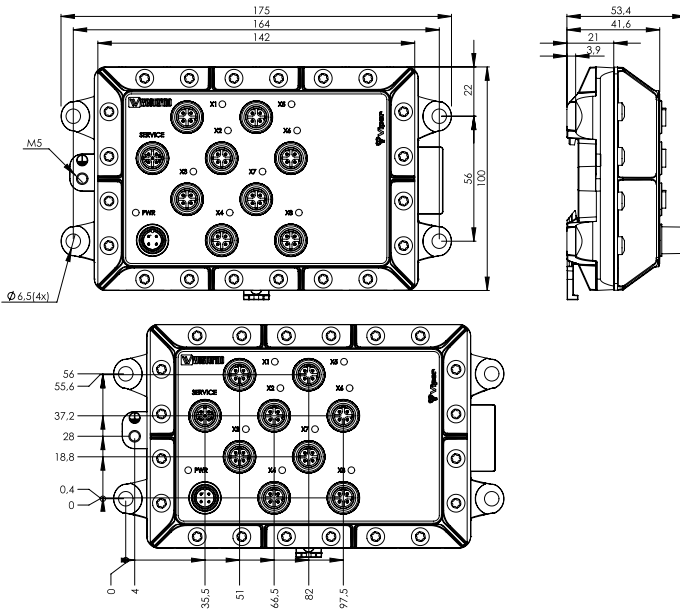
There are no sensitive or fragile components, hardening the product against shock and vibration making these units suitable for rolling stock usage. The power supply operates over a wide input range from 24 to 110 VDC ±40%.

Ordering Information	
Art.no	**Description**
3641-0340	Viper-008, Unmanaged, 8 × 10 / 100BaseT
3146-11xx	Patch and power cables, see www.westermo.com

Specifications Viper-008

Weight	0.9 kg
Degree of protection	IP65

Power	
Rated voltage	24 to 110 VDC
Operating voltage	16.8 to 143 VDC (14.4 to 154 VDC for 100 ms)
Rated current	110 mA @ 24 VDC 33 mA @ 110 VDC

Interfaces	
Ethernet TX port X1 to X8	8 x 10 Mbit/s or 100 Mbit/s

Temperature	
Operating	–40 to +70°C (–40 to +158°F)
Storage & Transport	–50 to +85°C (–58 to +185°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 50121-3-2, Railway applications - EMC: Rolling stock – Apparatus
	EN 50121-4, Railway signalling and telecommunications apparatus
	IEC 62236-4, Railway signalling and telecommunications apparatus
Safety	EN 60950-1, IT equipment
Environmental	EN 50155 Railway applications - Electronic equipment used on rolling stock
Fire protection	EN 45545-2, Fire protection on railway vehicles