

PRESS RELEASE

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Photos: Viper 212A-T5G-P8 (left); Viper 220A-T4G-P8 (right).

## New range of Ethernet switches manage increasing demand for high-speed communication networks on-board rail vehicles

To meet the growing need for more capacity in train communications networks, Westermo has introduced a new generation of Ethernet train switches that provide highly robust networks to support many end devices and high data rates. Specifically designed for train applications, the wide range of interoperable Viper switches delivers reliable and versatile solutions for train networks, enabling optimal configuration for every need.

Based on the previous well proven and highly popular train switches from Westermo, the new models provide a range of 12 and 20 ports standard Ethernet, Gigabit Ethernet and PoE (Power over Ethernet) variants as well as additional routing functionality to enable the connection of subnets and improved overall network performance.

The Viper is available with up to 5 gigabit ports to meet the need for connectivity of gigabit end devices, such as WLAN access points and network video recorders. Simultaneously, lightning fast failover on gigabit ring ports can be achieved.

The Viper offers eight PoE ports that support the IEEE 802.3af/at plug-and-play PoE communications standard. PoE enables both power and data to be transmitted on a single multi-core cable, especially useful for camera applications, reducing overall wiring and enabling faster installation. The Viper with PoE is available in variants for low or high voltage power supply range allowing installation in any rail

vehicle regardless of power standard. The Viper can also provide gigabit speed over the PoE ports, making the switch ideal e.g. for WLAN access points.

Specifically designed to provide highly robust networks and long term field operation, the Viper range has been tested and approved to exceed the EN 50155 on-board railway standard for electronic equipment, as well as an extended range of approvals with NFPA 130 (NA fire & smoke) and shunting radio EMC requirements from European rail authorities.

The Viper has been designed to be very compact and ultra-thin, enabling installation within the confined spaces of railcar panels. The M12 connectors are integrated into the housing to reduce size and further protect against vibration. With an ultra-robust design, sealed to IP67 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. A GORE-TEX(R) membrane is used to prevent condensation build up by normal climatic day/night cycling.

As well as high levels of reliability, the switches offer unique functionality that simplifies the creation, installation and maintenance of networks. The Viper switches' WeOS operating system provides an extensive suite of IP networking features and protocols allowing resilient and flexible networks to be created.

WeOS is also able to balance data traffic on the network to maintain maximum throughput and stability. The introduction of increased traffic from new cameras or video streams will therefore not affect the stability of the network. In the event of any link or hardware failure Westermo's unique FRNT technology is able to re-configure a large network in 20ms.

For easy configuration, the Ethernet switches can be safely accessed from anywhere in the network using the WeConfig network configuration tool, or directly via a console port on switch.

- ENDS -

**Product:**

[http://www.westermo.com/web/web\\_en\\_idc.com.nsf/alldocuments/BC27E672146D6E1DC125801E0045E67D](http://www.westermo.com/web/web_en_idc.com.nsf/alldocuments/BC27E672146D6E1DC125801E0045E67D)

**Photos:**

<http://ftc.beijer.se/files/C125728B003AF839/B4C31BA0927030DAC125803300425851/VIPER%20112A-T3G.jpg>  
<http://ftc.beijer.se/files/C125728B003AF839/B4C31BA0927030DAC125803300425851/VIPER%20112A-T5G.jpg>  
<http://ftc.beijer.se/files/C125728B003AF839/B4C31BA0927030DAC125803300425851/VIPER%20120A-T4G.jpg>  
<http://ftc.beijer.se/files/C125728B003AF839/B4C31BA0927030DAC125803300425851/VIPER%20212A-T5G-P8.jpg>  
<http://ftc.beijer.se/files/C125728B003AF839/B4C31BA0927030DAC125803300425851/VIPER%20220A-T4G-P8.jpg>

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