# EN50155 IP67

Industrial Ethernet Switch

The ITP series Ethernet switches are EN50155 certified and are especially designed for industrial applications such as rolling stock, railways, buses, and subways. With M12 connectors, ITP Ethernet switches are vibration and shock resistant. They can provide stable and reliable operation for mission-critical applications. To satisfy the needs of industrial and harsh environments, ITP Ethernet switches adopt an IP-67 rated housing which can effectively protect against dust, oil and water. In addition, ITP Ethernet switches also provide flexible Gigabit Ethernet solutions to meet various demands from different industrial applications.
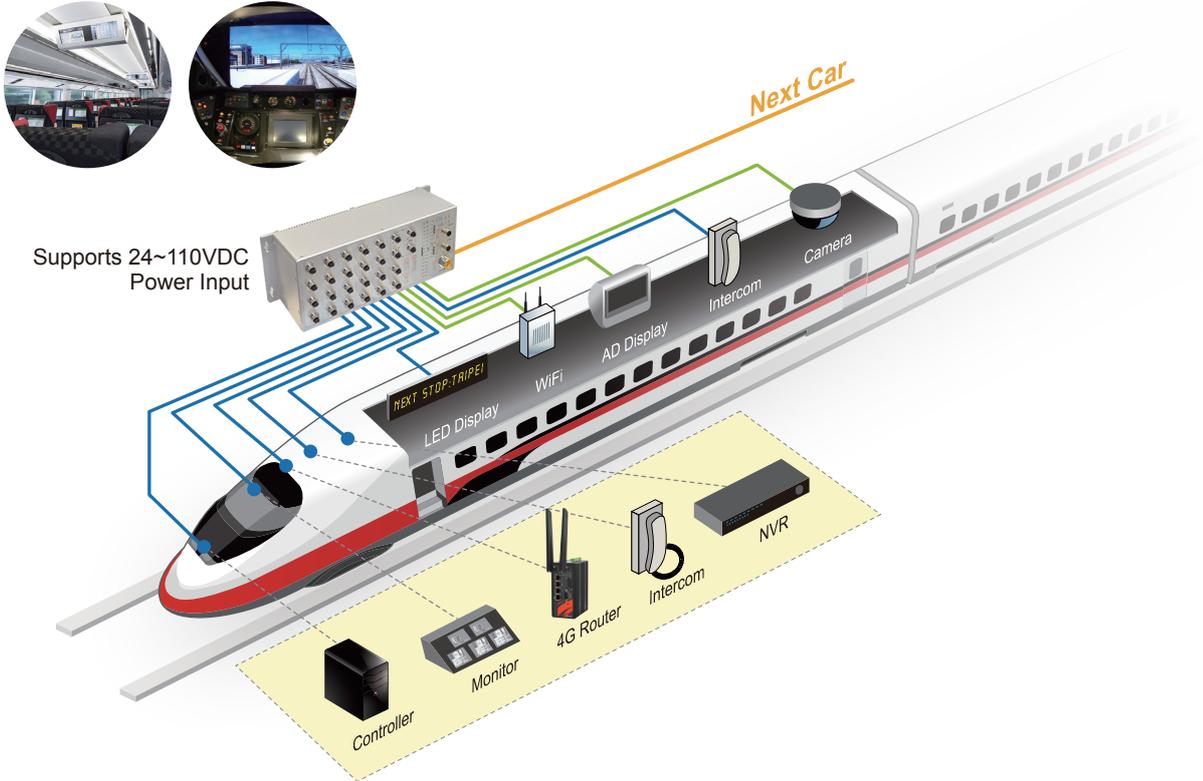
■ Resilient Bypass

EN50155 compliant products offer two copper interfaces with auto bypass function in the event of sudden power loss, particularly in daisy chain or linear topology networks. When power failure occurs in one of the switches on a train, the bypass relay function can activate, automatically bypassing the internal circuits and maintaining link between neighboring equipment. With this function, secure data transmission from terminals to backbone and higher network availability can be guaranteed.
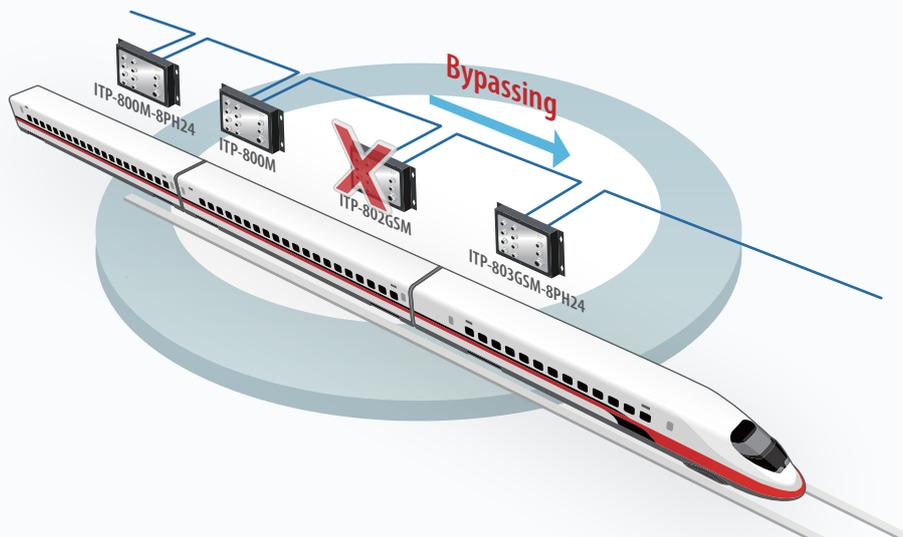
■ Application

▶ Smart Train

Modern transportation systems for rail are now incorporating many IOT devices, including PoE IP cameras, Wireless Access Points for Hotspots, Voice over IP communications, monitoring and digital signage. Ethernet switches, provided by CTC Union, for this market segment, include EN50155 certifications, utilize rugged M12 connectors and provide a wide range for DC power connections.
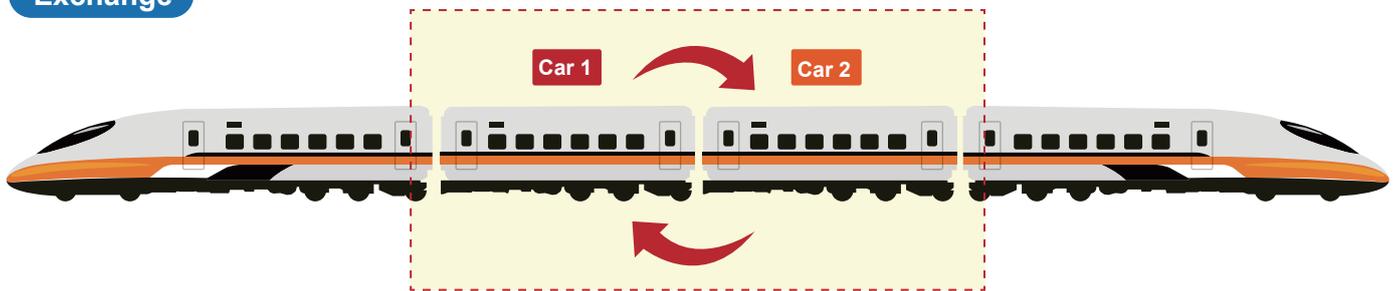
Supports 24~110VDC
Power Input

Next Car

Camera

Intercom

AD Display

WiFi

NEXT STOP:TAIPEI

LED Display

NVR

Intercom

4G Router

Monitor

Controller

▶ TTDP

TTDP (Train Topology Discovery Protocol) for train inauguration is a process where the network devices can automatically reconfigure for topology changes (i.e., as carriages are swapped). TTDP identifies the order of the Ethernet switches in a train backbone from the head and allows auto-reconfiguration of the other switches in the entire network.

Exchange

Car 1   Car 2

Remove & Add

Car 1   Car 2   Car 3

Add

Remove