CRA COMPLIANT

Wire Train Bus Gateway and Communication Converter

The data bridge in rail vehicles.

Enabling data interoperability.

The Selectron Wire Train Bus Gateway and Communication Converter connects different vehicle networks and protocols. This allows new devices to be integrated into existing architectures and enables proven subsystems to continue to be used via modern Ethernet networks.

SELECTRON

Wire Train Bus Gateway and Communication Converter

One platform. Multiple network domains.

Retrofit
Securely connect legacy devices to modern vehicle networks

New vehicle
Integrate heterogeneous subsystems into a consistent architecture

Tunneling
Transparent data transfer between bus and Ethernet technologies

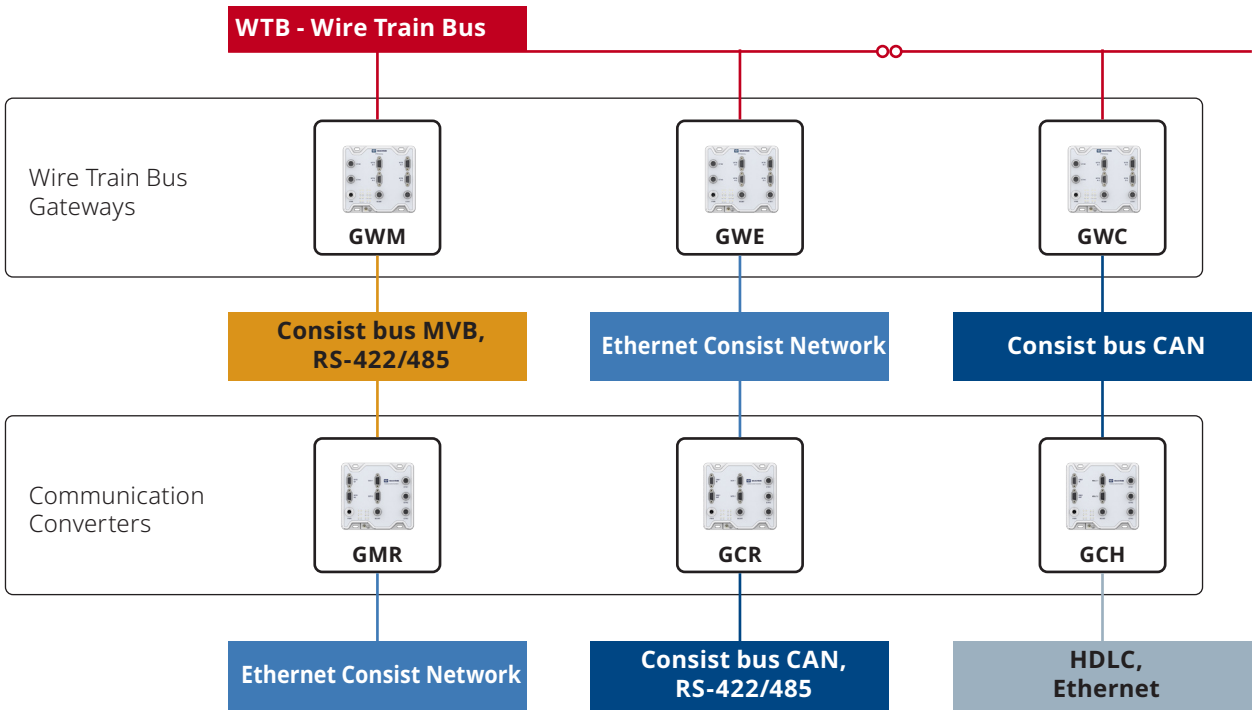
Protocols and networks.

Bus technology
MVB • CAN • RS-485 • RS-422 • HDLC

convert

Switched technology
Ethernet Consist Network • Vehicle Subsystems

Versatile configuration options.



SELECTRON

Technical highlights

Wire Train Bus Gateway

GWC 901-TW	**WTB / CAN** 2 × WTB interfaces: 4 × D-sub (m/f) 1 × CAN interface: 2 × D-sub (m/f)
GWE 901-TW	**WTB / ETH** 2 × WTB interfaces: 4 × D-sub (m/f) 3 × Fast Ethernet interfaces: 3 × M12, D-coded
GWM 901-TW	**WTB / MVB** 2 × WTB interfaces: 4 × D-sub (m/f) 1 × MVB interface (EMD or ESD): 2 × D-sub (m/f) 1 × Fast Ethernet interface: 1 × M12, D-coded

- Network and console CLI interfaces for device management via Layer 2, Layer 3, SSH and Telnet
- User-configurable device with straightforward upgrade and configuration
- Triple-redundant firmware images and automatic bootloader fallback for maximum reliability
- Compliant with IEC 61375 and UIC 556
- 48 V fritting-voltage unit
- Wide-range power supply

Communication Converter

GMR 901-TW	1 × MVB-EMD, 2 × RS-422/485
GCR 901-TW	1 × CAN, 2 × RS-422/485
GCH 901-TW	1 × CAN, 2 × HDLC

- Dual-homing TRDP Ethernet communication
- Designed for rolling stock
- Wide-range power supply

Safety & Cybersecurity

Built for dependable rail applications.

Cybersecurity by design
Compliant to IEC 62443-4-2, Security Level 2 (SL-C 2).
*) Certification planned for Q1 2027 for GWx and Q4 2027 for Gxx

Defense in depth
Protection against accidental and intentional data manipulation.

Certified platform
Integrated toolchain, operating system and safety lifecycle support reduce engineering and homologation effort.

Engineering & lifecycle support

Architecture & integration
Support for subsystem architecture, interface design and TCMS integration.

Application engineering
Open programming, integrated toolchain and libraries for efficient development.

Lifecycle & retrofit
Long-term availability, retrofit support and global service for rail projects.

Built for your project success

Certified & reliable
Developed for rail applications with long-term availability.

Shorter time to market
Certified platform and reusable software components reduce project time.

Flexible & scalable
From compact stand-alone control to distributed subsystem architectures.

Investment security
Lower total cost of ownership due to durable system components and predictable lifecycle costs.

Next steps | Find the right configuration for your rail vehicle project.

Get in touch
Expert advice and tailored support for your projects.

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