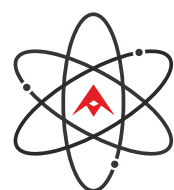


# ALLTRONIX

## Intelligent Railway Solutions

- Railway Computing & Networking
- Onboard Control Systems
- Train Networks
- Wireless Communication
- DC-DC Convertors and Capacitors
- Railway Components



# ALLTRONIX

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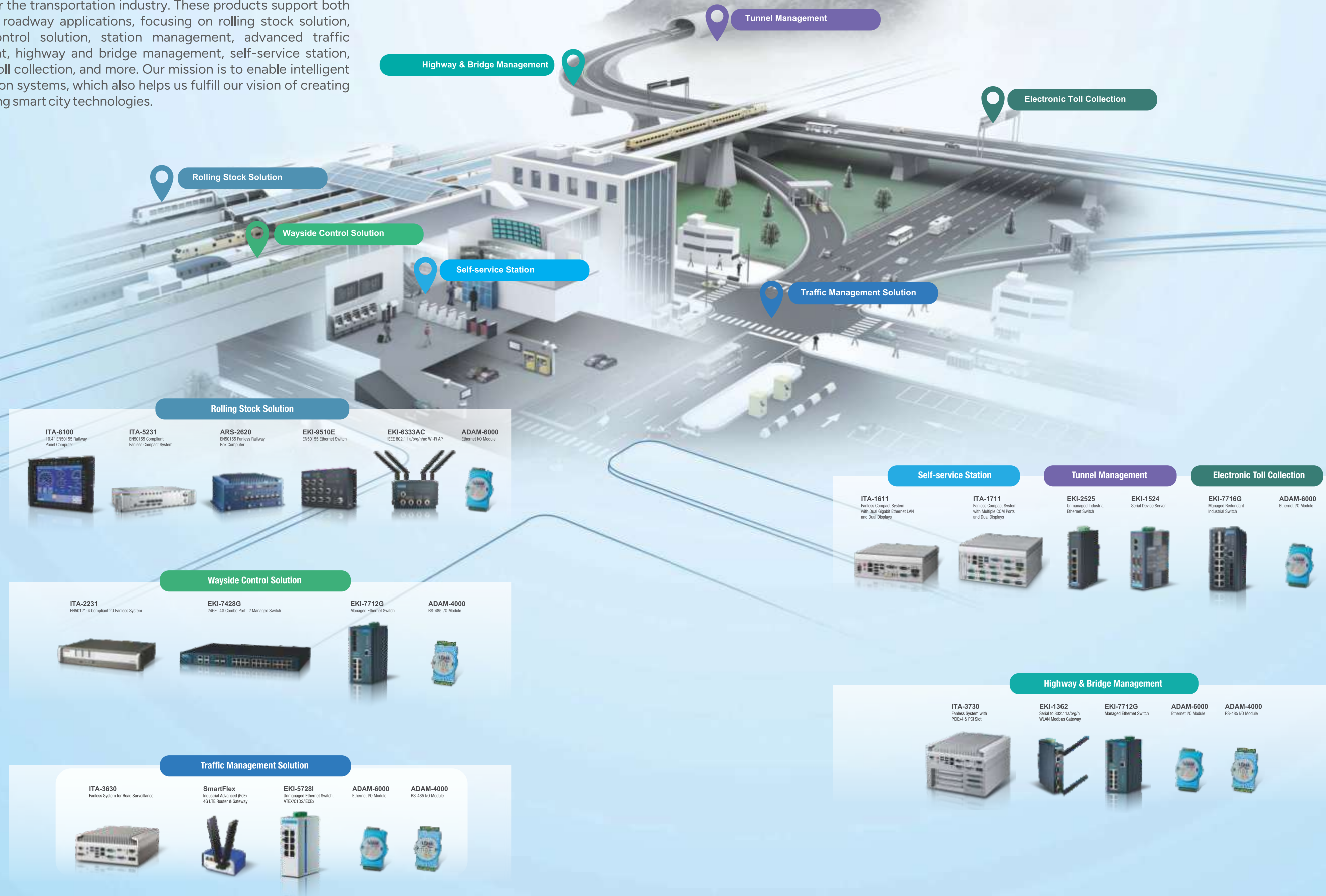
www.alltronix.com

### Our Leading Brands




## Intelligent Transportation Solutions

The Comprehensive Solutions for Intelligent Transportation Systems Alltronic has dedicated resources to designing and developing new products for the transportation industry. These products support both railway and roadway applications, focusing on rolling stock solution, wayside control solution, station management, advanced traffic management, highway and bridge management, self-service station, electronic toll collection, and more. Our mission is to enable intelligent transportation systems, which also helps us fulfill our vision of creating and delivering smart city technologies.



Rolling Stock Solution

**Rolling Stock Solution**

- ITA-8100 10.4" EN50155 Railway Panel Computer
- ITA-5231 EN50155 Compliant Fanless Compact System
- ARS-2620 EN50155 Fanless Railway Box Computer
- EKI-9510E EN50155 Ethernet Switch
- EKI-6333AC IEEE 802.11 a/b/g/n/ac Wi-Fi AP
- ADAM-6000 Ethernet I/O Module

Wayside Control Solution

**Wayside Control Solution**

- ITA-2231 EN50121-4 Compliant 2U Fanless System
- EKI-7428G 24GE+4G Combo Port L2 Managed Switch
- EKI-7712G Managed Ethernet Switch
- ADAM-4000 RS-485 I/O Module

Traffic Management Solution

**Traffic Management Solution**

- ITA-3630 Fanless System for Road Surveillance
- SmartFlex Industrial Advanced (PoE) 4G LTE Router & Gateway
- EKI-5728I Unmanaged Ethernet Switch, ATEX/CE/Ex
- ADAM-6000 Ethernet I/O Module
- ADAM-4000 RS-485 I/O Module

Self-service Station

**Self-service Station**

- ITA-1611 Fanless Compact System with Dual Gigabit Ethernet LAN and Dual Displays
- ITA-1711 Fanless Compact System with Multiple COM Ports and Dual Displays
- EKI-2525 Unmanaged Industrial Ethernet Switch
- EKI-1524 Serial Device Server
- EKI-7716G Managed Redundant Industrial Switch
- ADAM-6000 Ethernet I/O Module

Tunnel Management

Electronic Toll Collection

Highway & Bridge Management

**Highway & Bridge Management**

- ITA-3730 Fanless System with PoE/A & PO Slot
- EKI-1362 Serial to 802.11a/b/g/n WLAN Modem Gateway
- EKI-7712G Managed Ethernet Switch
- ADAM-6000 Ethernet I/O Module
- ADAM-4000 RS-485 I/O Module



# Edge AI Solutions



## Discrete GPU AI Solution

### ABOX-5220(G) Series

- 14th Generation Intel® Core™ i9-14900T Processor
- NVIDIA RTX™ and Intel® Arc™ GPU Options for AI Acceleration
- 2 x TSN Ready 2.5GbE Controller for Time-Sensitive Network
- 8 x GbE with Optional PoE Support for Easy Connection with IP Camera
- 8 x DI (9~60VDC), 2 x ADC (9~60VDC), and 4 x DO (5V, 100mA)
- Compliant with EN 50155, EN 45545-2 R25, ECE R118 Standards
- E-Mark Certified



Enter the AI Revolution Now

### IBOX-600/6001 Series

- ARM® Cortex®-A78AE 8-core Processor
- NVIDIA® Jetson Orin NX 16GB
- 1024 NVIDIA® CUDA® Cores, 32 Tensor Cores
- 3 x M.2 Slots for Wi-Fi / WWAN / SSD Expansion
- 1 x CAN FD for Vehicle Applications
- 4 x GMSL Cameras Supported (IBOX-601)
- Wide-range Power Input 9~60VDC with Smart Power Management
- Wide-range Operating Temperature -25°C~70°C
- Model M12 version available



## High-Performance Jetson Solution

### IBOX-650 Series

- ARM® Cortex®-A78AE 12-core Processor
- NVIDIA® Jetson AGX Orin 64GB
- 2048 NVIDIA® CUDA® Core, 64 Tensor Cores
- 2 x CAN FD for Vehicle Applications
- 3 x M.2 Slots for Wi-Fi / WWAN / SSD Expansion
- IP66 Design for Harsh Environment
- GMSL Cameras Supported
- Wide-range Power Input 9~60VDC with Smart Power Management
- Wide-range Operating Temperature -25°C~70°C



## In-Vehicle Video Surveillance

### ABOX-5211 Series

- 10th Generation Intel® Core™ i9 Processor
- 8 x DI, and 4 x DO and 4 x RS-232/422/485
- 3 x M.2 2280 Key M Support NVMe SSD Storage
- 8 x GbE RJ45 with PoE Support
- Wide-range Power Input 9~60VDC with Smart Power Management
- Wide-range Operating Temperature -40°C~70°C
- E-Mark Certified

# In-Vehicle Computing Solution



## Best Device for Railway Application

### ABOX-3630 (R) Series

- 11th Generation Intel® Core™ i7 Processor
- 5G / LTE / GPS / Wi-Fi / Bluetooth / CAN Bus Supported
- 2 x HDMI, 1 x DP, 1 x DVI-D (Four Independent Display Supported)
- 1 x 2.5 GbE & 3 x GbE (Selectable for RJ45/M12 Ethernet Connectors)
- Optional PoE with Max. 60W Power Budget
- Wide-range Operating Temperature -40°C~70°C
- Wide-range Power Input 9~60VDC (VBOX-3630)
- Isolated Power Input 24~110VDC for Rolling Stock (VBOX-3630R-M12X)
- Smart Power Ignition Management
- E-Mark & EN 50155 Certified



## Ignition Management for Variety Vehicle

### VBOX-3122 Series

- 11th Generation Intel® Core™ i7 Processor
- 3 x M.2 & 2 x mPCIe Slots for WWAN / Wi-Fi / SSD / GPS / CAN Expansion
- 2 x RS-232/422/485 Serial Ports
- 4 x DI, 4 x DO, 2 x Analog Input
- Wide-range Operating Temperature -40°C~70°C
- Wide-range Power Input 9~60VDC
- Smart Vehicle Power Management
- E-Mark Certified



## Efficient Fleet Management Solution

### VBOX-3123 Series

- AMD Ryzen™ Embedded R2312 2C/4T Processor
- Dual HDMI® supports resolution specified in HDMI® 2.0b
- 1 x M.2 2280 Key M supports NVMe or SATA SSD
- 1 x M.2 3042/52 Key B supports USB 3.2 for WWAN w/ Dual SIM
- 1 x M.2 2230 Key E supports PCIe and USB 2.0 for Wi-Fi/BT
- 2 x RS-232/422/485 Serial Port
- 4 x DI, 4 x DO, 2 x Analog Input
- Wide-range Operating Temperature -40°C~70°C
- Wide-range Power Input 9~60VDC
- Smart Vehicle Power Management
- E-Mark Certified

# Display Solution for ITS



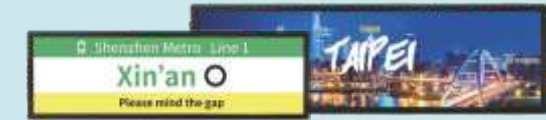
## For Vehicle Installation



### VDM-700 HD / VDM-101 HD

- Effortless One-Cable Connection
- High Resolution: 1280 x 720 (700HD), 1280 x 800 (101HD)
- High Brightness: 560 Nits (700HD), 500 Nits (101HD)
- Secondary HDMI® Video Input
- Projected Capacitive Multi-touch
- 9~48VDC Power Input
- Operating Temp. -20°C~60°C
- E-Mark Certified

## For Passenger Information



### VDM-286RS-AC/VDM-370RS-AC

- High Resolution: 1920 x 540
- High Brightness: 700 Nits (286RS), 1,500 Nits (370RS)
- Anti-Glare Surface Treatment (Haze 28%)
- Side / Bottom I/O Design for Slim Wall Mounted
- Landscape / Portrait Mounting
- Reliable 24/7 Operation
- Reliable for Public Transportation Terminals

## Delivers Stunning Productivity



### SBOX-2603 Series

- AMD Ryzen™ Embedded R2312 2C/4T Processor
- Dual HDMI® Supports Resolution Specified in HDMI® 2.0b
- 1 x M.2 2280 Key M Supports NVMe or SATA SSD
- 1 x M.2 3042/52 Key B Supports USB 3.2 for WWAN with Dual SIM
- 1 x M.2 2230 Key E Supports PCIe and USB 2.0 for Wi-Fi/Bluetooth
- Wide-range Operating Temperature -30°C~60°C
- Power Input 12VDC

## Fully Industrial Specifications

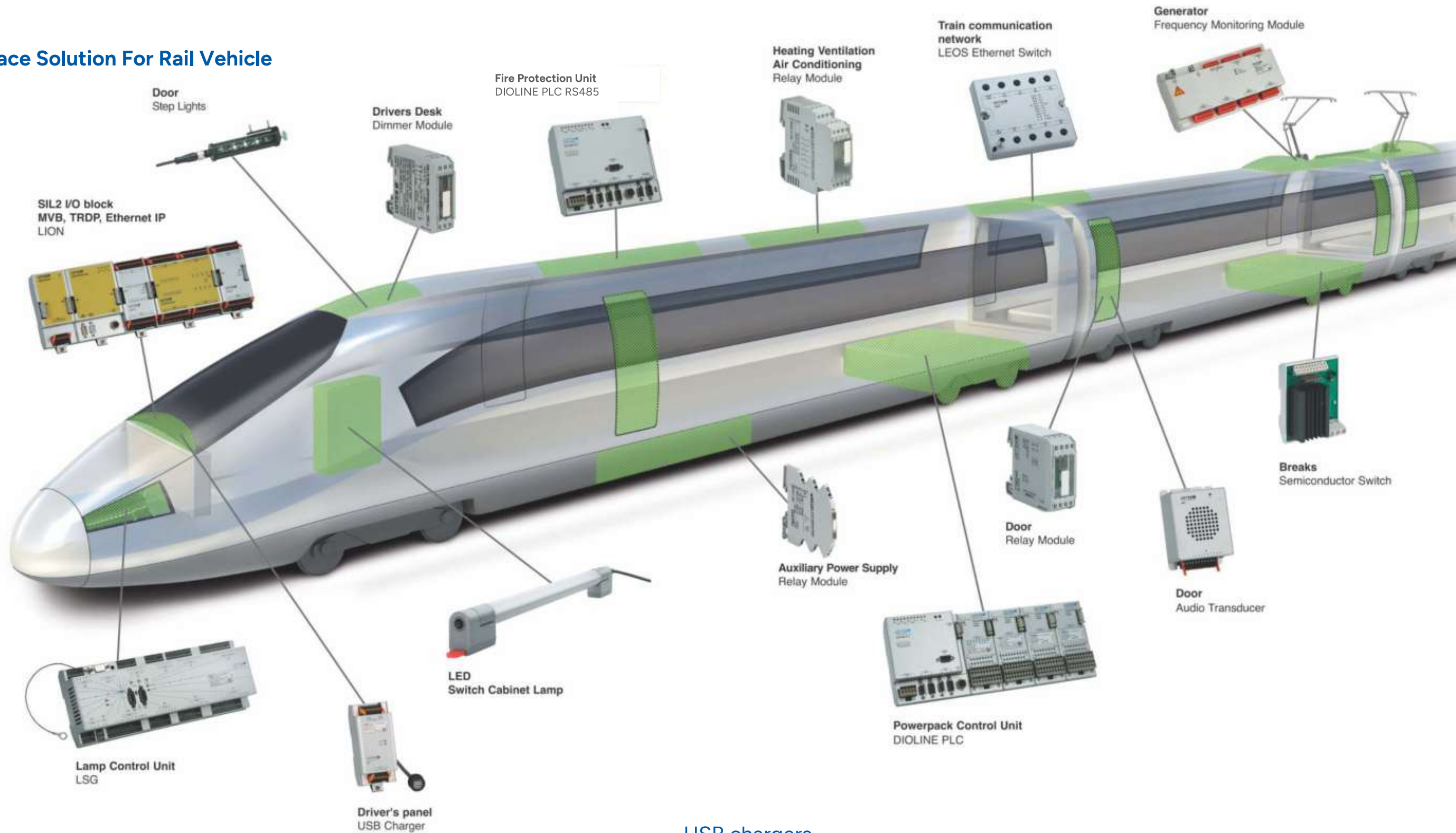


### SBOX-2321 Series

- Intel Atom® x6416RE Quad-core Processor
- Dual Display Output (1 x DP / 1 x DVI-D)
- 2 x 2.5GbE for Embedded IoT Connection
- 3 x M.2 & 1 x mPCIe Slots for Wi-Fi / WWAN / CAN Expansion
- Wide Operating Temperature -40 ~ 70°C for Harsh Environment
- Dual SIM for Network Redundancy
- Industrial Fanless Design



# Control & Interface Solution For Rail Vehicle



Compact  
Flexible  
Safe



### Analog/Analog-Limit Switch Temperature/Analog-Limit Switch

Analog input up to AC/DC 300 V and AC/DC 10 A  
Temperature input for PT100/PT1000, 2-, 3-, 4-wire,  
Potentiometer and thermocouples  
1 Analog output  
2 Solid-state limit switches DC 110 V/ 1,5 A  
Configurable by software FDT/DTM  
Wide range power supply DC 24 V - 110 V  
Galvanic 5-way isolation  
Type tested acc. to EN 50155

### USB chargers for the passenger area

Safely  
charged



### Economical solution for charging mobile phones and tablet PCs on rail vehicles.

- Two USB-A ports
- Supply voltage DC 24 V
- Output voltage 5 V
- Output current 1,5 A per port
- Y-type pluggable terminal
- LED status indication per port
- Optional with protection cap IP65
- Type tested acc. to EN50155

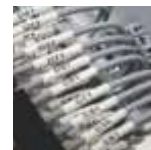
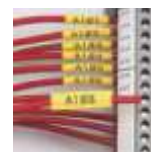


## Identification Solutions

in Rail Vehicle Manufacturing

### Identification Solutions for inside and outside rail vehicle

- Diesel Resistant Irradiated Sleeves
- Zero Halogen Flame Retardant Polyolefin according to EN-45545
- Cable Tags in Stainless Steel and Thermoplastic from -70 to 130 C
- Component Identification and Passenger Coach Labels with or without RFID-Technology
- Printing Solutions - Customized in Vehicle Identification
- Safety and Facility Identification
- Durable, long-lasting barcode labels, asset tags and variable information plates. Sealed within the anodic layer, the print is resistant to abrasion, intense temperatures up to 3430C, UV exposure, chemicals and solvents. Tags and labels remain readable for more than 30 years outdoors.



## Railway Power Supplies



Power Supplies for Railway Technology



Customised Solutions



Power Distribution Systems



AC/DC Supplies for Medical Applications



DIN Rail Modules



Print Power® AC / DC Modules



Transformers & Chokes



Battery Chargers



DC/DC Converters for Vehicle Technology

MTM Power - Railway Power Supplies in compliance with EN 50 155, EN 50 121-3-2, EN 45 545-2, EN 61 373 Cat. 1 Cl. B

HVC: High Voltage Converters for Operation at Contact Wire  
Power Range: 250 W

PCMGS: Encapsulated DC/DC Converters  
Power Range: 14 W (Chassis and PCB Mounting)

PCMDS: Encapsulated DC/DC Converters  
Power Ranges: 30 W (Chassis and PCB Mounting)  
60 W, 80 W, 150 W (only Chassis Mounting)

PCMD: Compact, Encapsulated DC/DC Converters  
Power Ranges: 250 W, 400 W (only Chassis Mounting)

MPG: Multi-Power Supply System with 2-5 Plug-In Positions  
Power Ranges: 500 W, 2000 W



## Cable Gland Solutions

IP 69K ingress protection, strain relief, EMC-safe, ATEX-tested and much more

The extensive UNI Dicht system is synonymous in the industry with high-quality, application-specific cable glands. Users all over the world are impressed with their high ingress protection, operational reliability and durability, not to mention resistance environmental effects and impacts. UNI Dicht meets all the current EU requirements for cable entries – for example, the new fire protection standard for railway engineering – as well as relevant international certifications such as UL and CSA.

A UNI Dicht cable gland consists of the cable gland body and the appropriate sealing insert.

- 6000 individual parts for 20,000 application-specific cable glands
- Metal and plastic variants
- M4 to M120 and Pg7 to Pg48 as well as NPT, CTG and imperial threads
- Ingress protection rating IP 68(10 bar) and IP 69K
- EMC, ATEX, multiple hose, corrugated conduit and elbow cable glands
- Operating temperatures -400C up to +1300C (TPE-V) and -600C up to +2000C (Silicone)
- Reducers and Expanders

## Railway Industry

- Vibration Resistant
- Strain Relief
- Temperature Resistant
- Meets Standard EN 45545-2
- Saves Weight and Space



## Flexible and safe cable protection:

In the fields of mechanical and plant engineering, automation/robotics and railway engineering, system components are subject to extreme stresses, namely dynamic, as well as others. PFLITSCH ProTect is a sophisticated and perfectly coordinated cable protection system that protects cable installations against mechanical damage. The PFLITSCH ProTect corrugated conduit system is resistant to torsion and abrasion and yet flexible enough to withstand the rapid movements of a robot arm. PFLITSCH ProTect fittings and corrugated conduits provide that desirable extra bit of safety.



## Cables for Railway Technology

SAB Rail – Cables for rolling stock applications

- SABIX insulation and sheath (zero halogen)
- meets highest railway industry standards of flame protection, toxicity and smoke density
- External certified acc. to EN 45545 and DIN 5510 (European/German market)
- CAT 7 / CAT 6 / CAT 5E
- Infotainment
- Seat wiring
- Driver's control panel wiring
- Coiled radio cables
- Drive systems
- Motor connection cable
- Switch cabinet and control panel wiring
- Air conditioning, ventilation and heating systems
- Sensor and component connections
- Brake systems
- Door and footboard controls
- Electric railcar jumper
- Train safety systems
- Train radar

