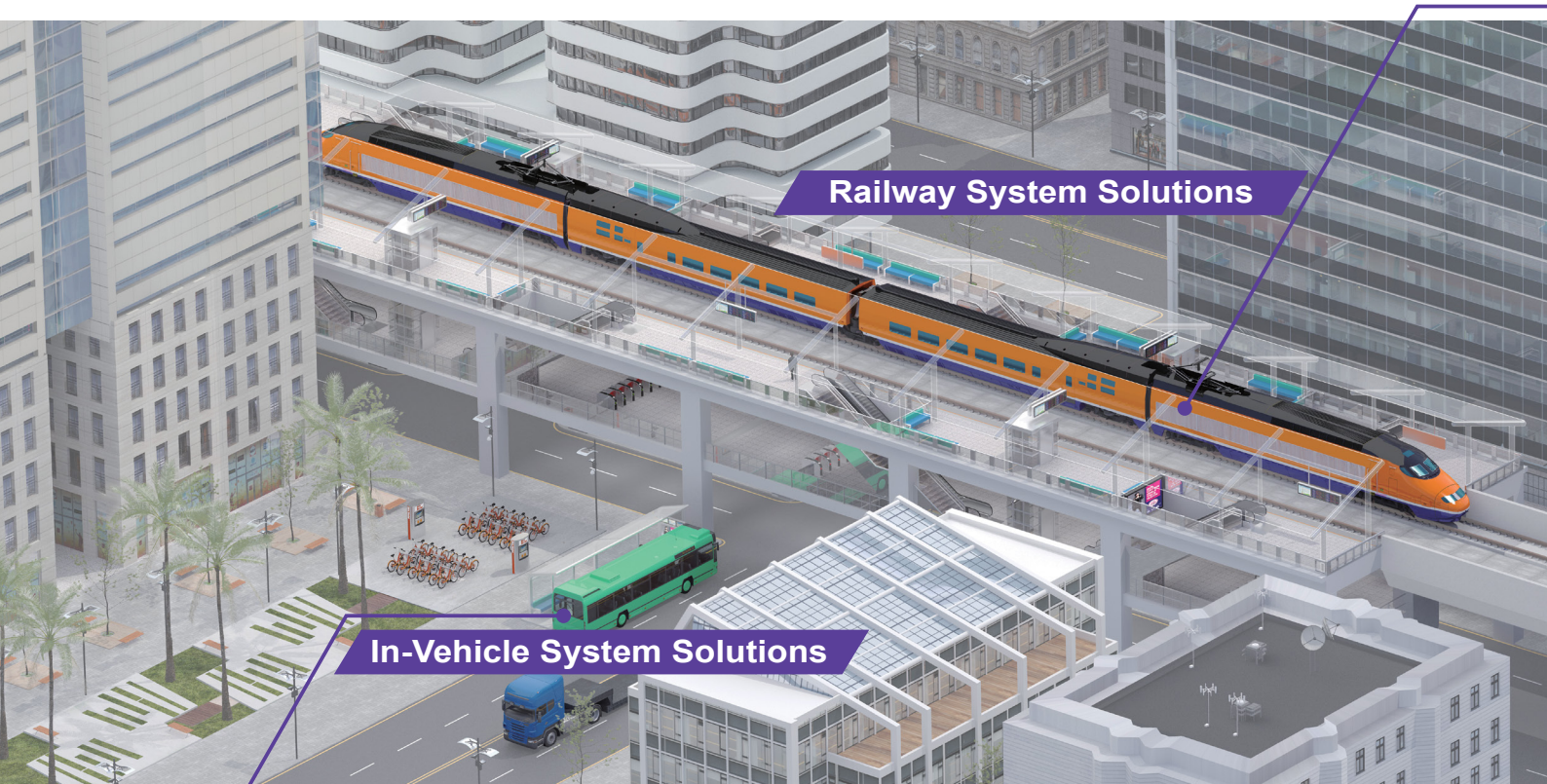




# IEI Smart Transportation Solution

IEI has for decades been dedicated to industrial automation. IEI smart transportation solutions focus on railway, vehicle, and marine intelligent solutions. Smart transportation helps enterprise and people to improve efficiency during the journey from varied data acquisition, analysis, and precise prediction. Furthermore, with real-time streaming NVR (Network Video Recorder) logs, critical moments can be recorded when accident happens, therefore enhancing safety of drivers and passengers on the move.

IEI has a complete line of transportation products which are fanless and designed to resist vibration, shock, and extreme temperatures. IEI's transportation products support IRIS solution which is an easy way to remotely control and manage all your devices.



## Railway System Solutions

## In-Vehicle System Solutions



## Fleet Management Application

With the increasing rate of motor vehicle, the surveillance application is becoming more importation for the city. Therefore, IEI IVS Series and IKAPC Series combine all communication systems in our device to provide powerful fleet management. In addition, road surveillance can be applied through the IVS Series to ensure passenger and traffic safety. With these features provided by our in-vehicle systems, enterprises are allowed to track vehicles through the system.

## Advertising System Application

New generation digital signage is used in a more efficient way to get more passengers' attention. IEI offers the IDS Series for digital signage application, which can be integrated with taxi, bus, and train. The IDS Series can easily provide real-time messages, traffic information, and advertisement to passengers at the public transportation station. The IDS Series is designed with multiple independent displays, and the iRIS module can be installed to achieve remote management from a variety of devices simultaneously.





## Automatic Fare Collection Application

Automatic Fare Collection System (AFC) for public transport consists of ticket vending machines and automatic gate machines. In this application, IEI offers the TANK-600 series which has multiple COM ports for connecting between data terminal equipment and data communication equipment. The TANK-600 series can fulfill user's demand to connect a large number of ticket vending machines and gate machines, giving customers a whole new experience of AFC.



## Public Transportation Application

Public transportation system includes taxi, bus, truck, and railway. IEI offers the IRS Series for public transport, especially for rolling stock application. The IRS Series is compliant with EN50155 standard and equipped with M12 connectors to enhance shock and vibration resistance for public transit operation. The IRS Series combines passenger information system (PIS), network video recorder (NVR) for surveillance and data transmission for remote control into one powerful, integrated system.



## Marine System Solutions



## Integration of Multiple Systems on Bridge

The common bridge systems usually need to collect and analyze many observation data, including anemometer stations, speed logs, weather condition and GPS signal. A powerful and reliable system is necessary for handling these complicated data. IEI marine computer and embedded box possess high performance CPU with reliable fanless design to overcome the ruggedized marine environment.

## The Application of Signage at Open Deck

For large cruise ship, there are an amount of information displayed at open deck areas. The marine monitor possesses many sophisticated features, including IP 66 dust- and water-proof front panel, wide-range operating temperatures, multi-point capacitive touch, wide viewing angles and OSD control, providing a good visual experience toward customers and sailors.



## In-Vehicle System Solutions

IEI has a total solution for multi-vehicle monitoring and dispatching system, allowing enterprises to track vehicles through the system, and to prevent loss of goods in transit. We combine all communication system and fleet management with our IoT solution to help enterprises on tracking their goods through electronic maps, internet access, and mobile communication system with 3.75G/Wi-Fi/Bluetooth/GPS/RFID in real time and into safety.

- Fanless and rugged design for harsh environment
- Rugged design for vibration and shock resistance
- Wide range DC power input design
- Wireless communication
- CAN bus and OBD-II support for vehicle system
- In-Vehicle device compliant with the E-Mark standard



- Fanless system with Intel® Celeron® N3160 processor
- Full-size PCIe Mini for expansion
- Dual display



- Robust IP65 aluminum front bezel
- Aesthetic ultra-thin for panel mount installation
- Wide temperature support

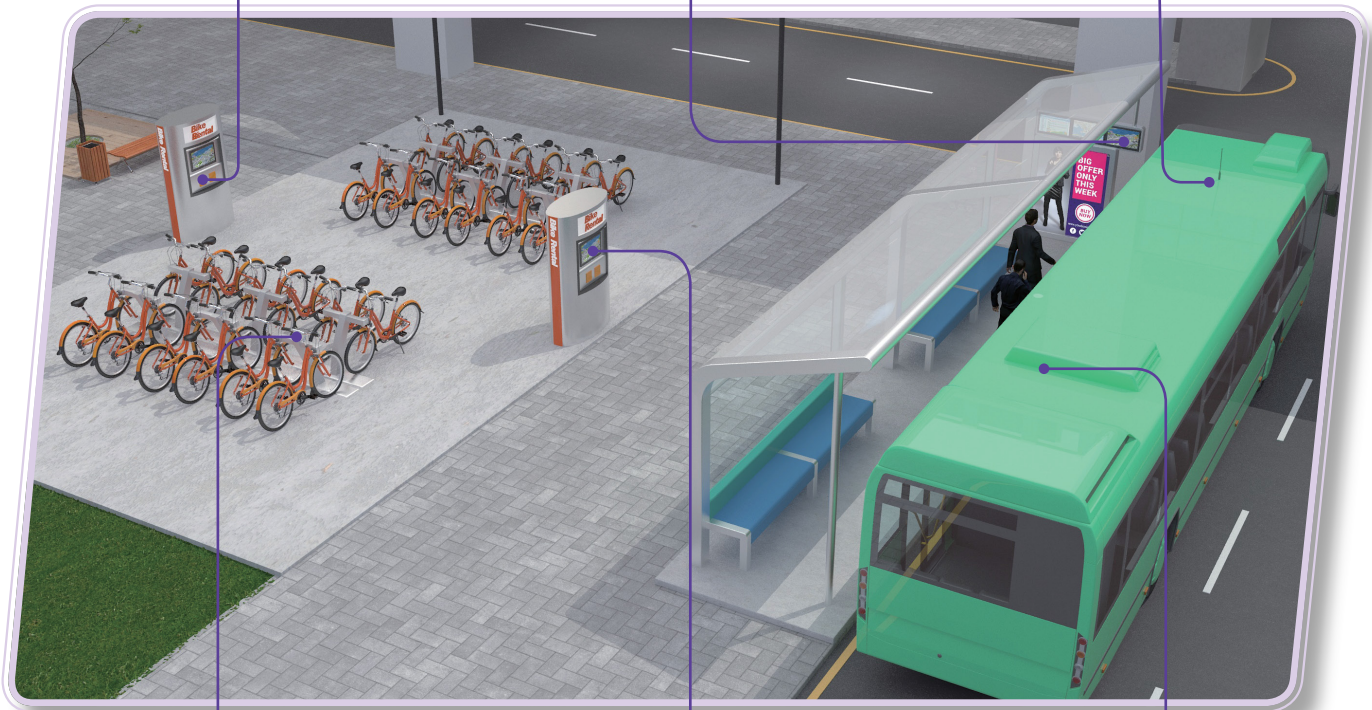


- Skylake ULT platform (COM Express CPU card)
- 4 x PoE IEEE802.3af
- Optional 3G/Wi-Fi/Dead Reckoning

### Traffic Information System

### Passenger Information System

### Video Surveillance



### Public Bike Rental System



- Fanless system with Intel® Celeron® N3160 processor
- Full-size PCIe Mini for expansion
- Dual display

### Kiosk



- Low power consumption
- IP65 compliant front panel
- Dual GbE for backup

### Fleet Management



- 10.1" TFT LCD with projected capacitive touchscreen
- Built-in HSUPA/GPRS/GSM, Wi-Fi and Bluetooth
- Built-in camera



## Railway System Solutions

IEI railway system (IRS) series is compliant with the EN 50155 standard and meets the requirements for railway environments. The IRS-100 has multi-function capability, making it not only a surveillance system but also an entertainment system, such as control unit, passenger information system (PIS) and network video recorder (NVR). Among these technologies, using IP cameras for surveillance application is getting popular.

- High-performance CPU with Intel® Core™ processor
- Fanless design for rolling stock products and supports hot-swappable SATA SSD module
- Operation reliability and maintainability
- Real-time network communication for train drivers and control center
- Special design for tough environment and wide operation temperature range
- Fully compliant with EN50155 certificate for rolling stock products



- Connection (LTE, 3G, wireless)
- Real-time railway information monitoring & recording

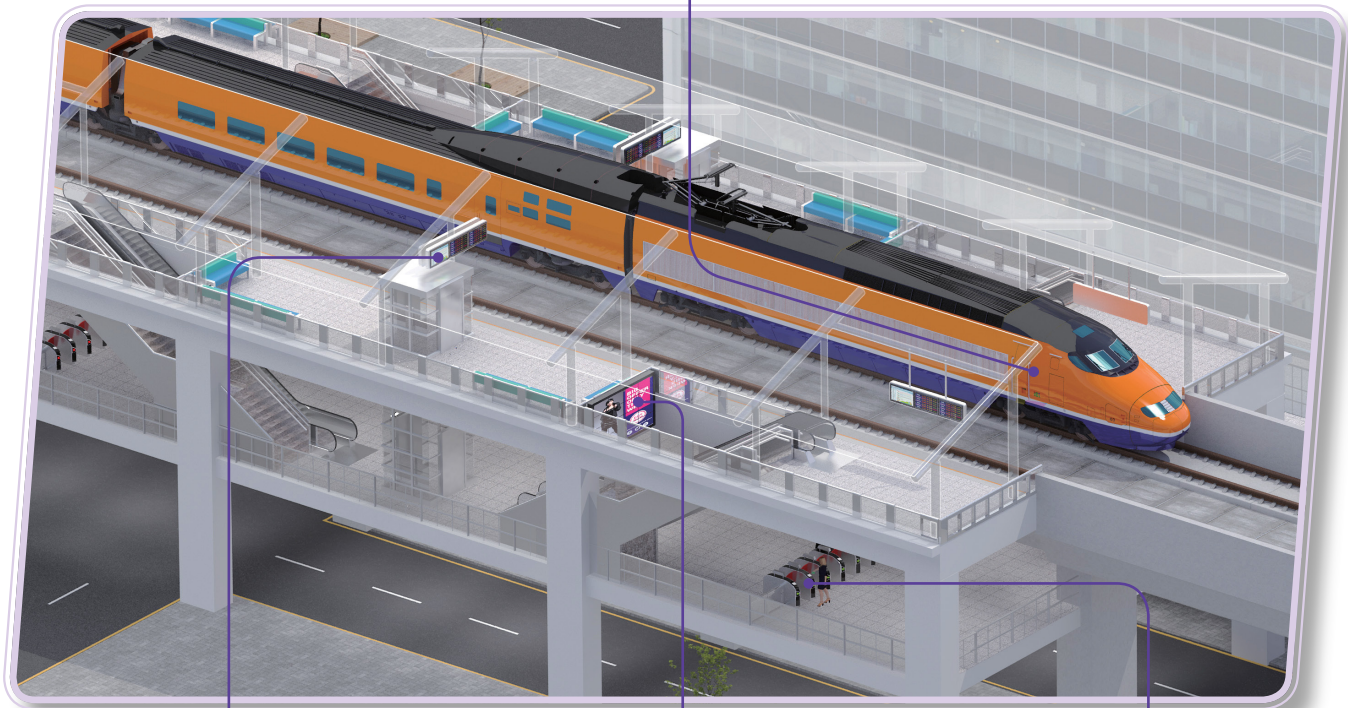


- Ruggedized dual M12 LAN port and dual SIM card design
- 24V DC / 110V DC
- Compliant with EN50155-T3



- M12 connectors to guarantee reliable operation
- Leading EN50155-compliant Ethernet switch
- Wall mounting enabled

### Train Surveillance



### Passenger Information System



- Robust IP65 aluminum front bezel
- Aesthetic ultra-thin for panel mount installation
- Wide temperature support

### Digital Signage



- Triple HDMI for multiple displays
- Two full-size PCIe Mini for expansion
- High resolution display

### Automatic Fare Collection System



- Fanless system with Intel® Celeron® N3160 processor
- Full-size PCIe Mini for expansion
- Dual display

## Marine System Solutions

The maritime field faces critical environmental challenges, therefore the reliable and rugged systems is essential. IEI provides professional marine-grade embedded box, panel PCs and monitors with leading technologies and industrial grade materials which are perfect for applications on the dock, on the open deck, or in the control room or bridge. Considering various and complicated marine environment and real applications, IEI introduces a total solution from harbor to ship which provides customers a reliable environment.

- Fanless and front IP 66 design for marine environment
- DNV compliant isolation protection on COM and power
- Wide temperature design and flat-bezel PCAP touch

- Multiple video input and output for marine monitor
- Dual isolated AC/DC input with redundant power protection
- Remote OSD setting through LAN, RS-232, RS-422 and RS-485



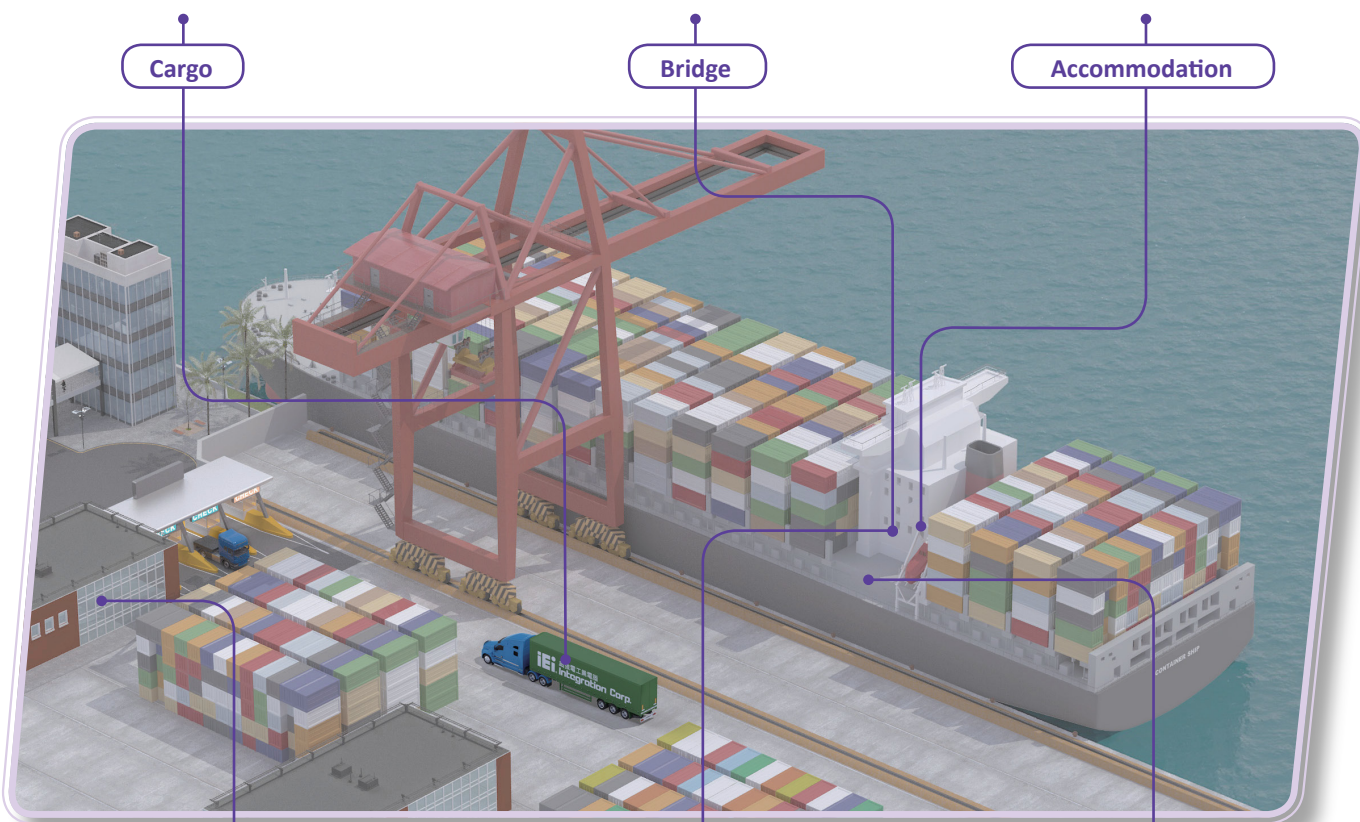
- Support temperature, vibration, humidity and GPS data logging
- Design for long-term data recording
- 13.56 MHz RFID, ISO15693 RF air protocol



- Fanless PPC with Intel® Core™ i5 dual-core processor
- Isolation protection for COM and power
- Compliant with DNV, IEC 60945 4th



- Triple independent display: HDMI, DVI & VGA
- Wide operating temperature design
- 2 x 2.5" SSD bay with RAID 0/1 function



- Thunderbolt support
- Missing mode protection
- Smart power management



- Wide viewing angle, full range dimming
- Remote OSD control through LAN & COM
- Compliant with DNV, IEC 60945 4th



- IP67 aluminum enclosure protection
- Built-in internal wireless function
- Ambient light sensor detection