



Railroad Control System
Europe

Railway Door Control System

Project Background

In railway applications, the engineer activates the car doors each time the train stops at a station. For this reason the client decided to build a network system on the trains to extend the communication distance, and use the NPort® IA5250-T to create reliable serial-to-Ethernet communications.

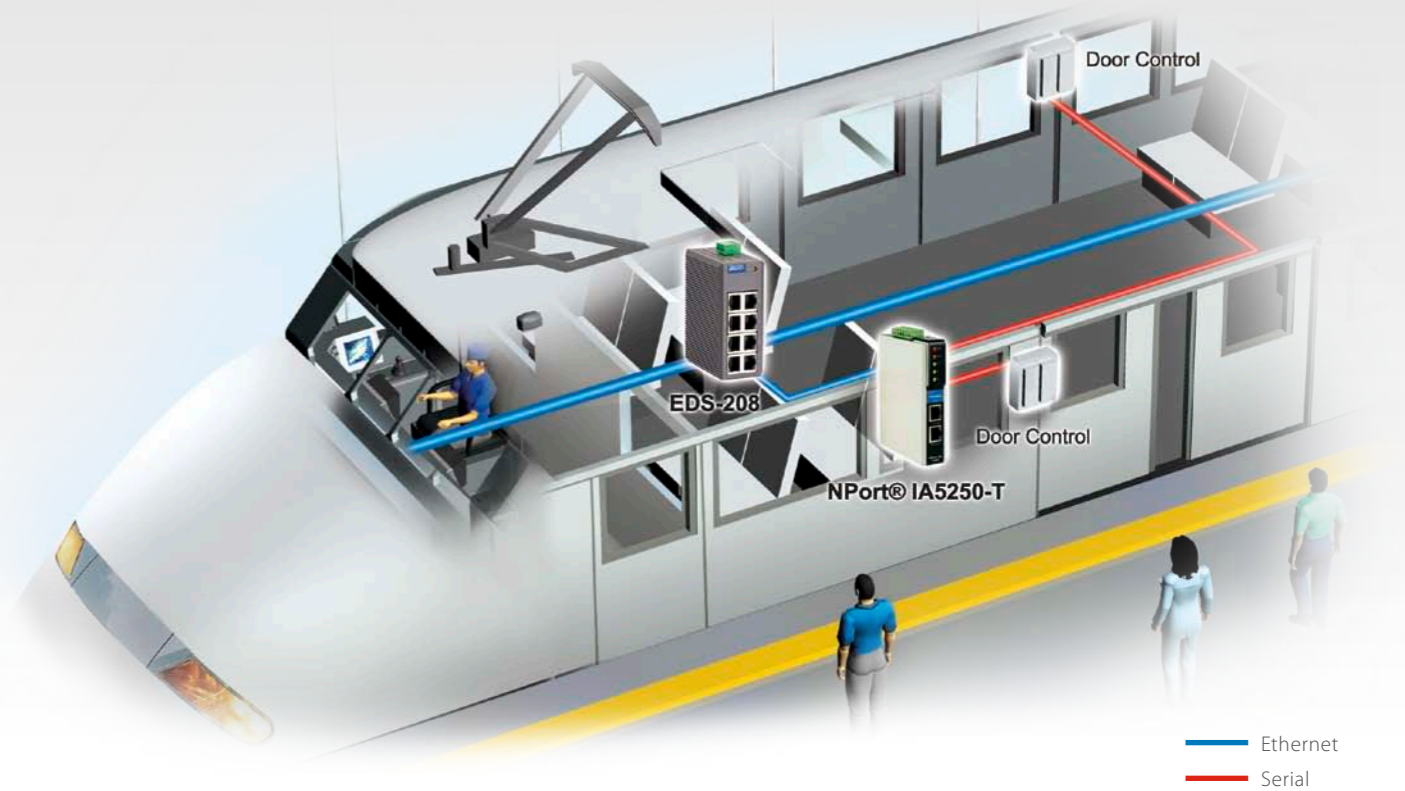
To enhance the reliability of the system, our client requested the following specifications for the door control system.

- ◆ Small size, since railway cars have a limited installation space.
- ◆ Vibration and shock proof since trains are constantly subjected to shock and vibrations.
- ◆ Wide operating temperature for systems that are subjected to harsh environments.

Moxa's Solution

Moxa's NPort® IA5250-T is a DIN-Rail mountable industrial-grade device server with two 10/100BaseTX ports. To endure harsh environments, the NPort® IA5250-T supports an operating temperature of -40 to 75°C and relative humidity between 5 and 95%. Installation space in railway cars is usually quite limited, which is why we designed the NPort® IA5250-T with cascading Ethernet ports for easy set-up and to save space. In addition, we designed the NPort® IA5250-T to be vibration and shock resistant (complies with IEC60068-2-6 and IEC60068-2-27).

Application Topology



Benefits

- ◆ Redundant DC power inputs
- ◆ Cascading Ethernet ports for easy wiring
- ◆ Reliable serial-to-Ethernet data transmission
- ◆ Din-Rail mountable to save space

Products Implemented



EDS-208

- 10/100BaseT(X) (RJ45 connector), 100BaseFX (multi-mode, SC/ST connector)
- IEEE802.3/802.3u/802.3x support
- Broadcast storm protection
- DIN-Rail mountable
- -10 to 60°C operating temperature range

NPort® IA5250-T

- Versatile socket operation modes
- Redundant DC power inputs
- Warning by relay output and e-mail
- Two 10/100BaseTX ports (RJ45)
- IP30-rated housing
- Wide operating temperature range of -40 to 75° C
- Industrial-grade certification in UL/cUL Class 1 Division 2 Groups A, B, C, D, and ATEX Class 1 Zone 2

