

## AAEON pushes mobile railway control and passenger information systems to the next level in advanced performance

As rail travel continues to expand with an annual market growth rate of 4.1% across much of the globe, passengers are increasingly seeing their travel and commute as an extension of their business or leisure activities. As a result, there is a growing demand for rolling stock control systems that can provide real-time Passenger Information Systems (PIS), and In-Train Entertainment Services (ITES).



**A**AEON takes a leap forward to meet the most demanding requirements of today's railway embedded control systems and beyond with its cutting edge AEV-635X Series Box PC system featuring a train to ground link communication gateway that provides WiFi access for passengers via an on-board network, driver console as well as detailed passenger information displays. Its rich expansion design supports various seamless communications, such as GPS, GSM/GPRS, 3G or 4G/LTE modules.

Being EN50155 Tx compliant, the robust Intel® Core i7-3517UE powered AEV-635X Series rolling stock control unit is designed to handle the rigors of railway service with wide range operation temperatures of -40°C ~ 70°C and variable power ranges of 43 ~ 160VDC. The inclusion of this powerful and low TDP processor, along with its rugged and lockable M12 connector to withstand vibration and shock, made the AEV-635X Series preferred choice for a famous Polish railway/ vehicle manufacturer seeking a cost effective surveillance system. The company was also able to take advantage of AAEON's dedicated worldwide engineering and support services to ensure that the Box PC's firmware and hardware were well tailored to the company's needs for total compatibility with their current systems while at a price well within their budget.

To achieve the EN50155 compliance and provide power protection that shields the unit against voltage surges and spikes as well as load-dump, cold-cracking, under voltage protection (UVP), over

voltage protection (OVP) and short-circuit protection (SCP), the AEV-635X Series underwent a series of inspection tests to verify its tolerance against a number of real-world hazards and to ensure its long term reliability in the field. These tests included climatic tests of extreme low and high temperatures and exposure to salt mist and moisture. Various voltage supply, voltage surge and electrostatic discharge tests were also performed to confirm its high level of electromagnetic compatibility. A series of radio interference susceptibility tests as well as shock and vibration tests help to gauge the box PCs immunity to environmental shocks throughout the lifetime of the system for EN50155-TX industry compliance.

As the freight and railway passenger industries advance and become more competitive, the AEV-635X Series will be able to provide a long term competitive advantage to system engineers and designers with its multiple I/O device support, anti-drop lockable M12 connector and customizable HDD configurations, for maximum system flexibility. Independent VGA and DVI support allow for multiple display assemblies, while paired COM, LAN and USB ports provide for easy expansion in a range of applications.

With these features, the AEV-635X Series is designed to increase operational cost effectiveness as this powerful box PC system squarely meets the demands of the next generation of live information protocols and multipoint communication systems.

*For more product information, please go to [www.aeon.com](http://www.aeon.com).*