



# Case Study

## HMI for Access Control and Monitoring System

## Enhancing Industrial Security with Advanced HMI Solutions for Access Control and Monitoring System

In industries where security is paramount, businesses and organizations are constantly seeking ways to improve security while maintaining operational efficiency. One such solution that has gained prominence in recent years is the Human-Machine Interface (HMI) integrated with access control and monitoring systems. These systems provide an intuitive way for users to interact with security systems, ensuring that only authorized personnel can access certain areas while simultaneously monitoring the overall security environment in real time.

### Challenges

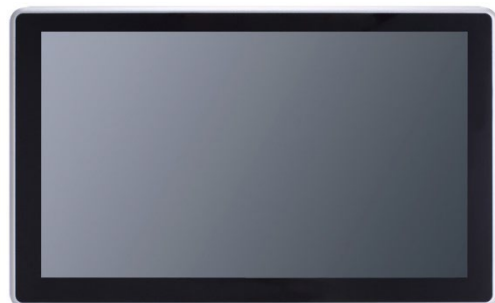
The customer, a leading producer of adhesive tapes and hygiene components, approached us with the need for a reliable, high-performance HMI solution to upgrade their existing Access Control and Monitoring System (ACAMS). The company required a solution that could meet the rigorous demands of their industrial environment while balancing cutting-edge performance with long-lasting durability. The goal was not only to enhance the security and monitoring capabilities but also to ensure seamless integration into their existing infrastructure without compromising efficiency or reliability.

### Main Requirements

- 15.6" display with PCAP multi-touch screen
- High-performance Intel® Core™ processor
- A slim design to fit into space-constrained setups
- Rich I/O for seamless device integration
- Robust IP65-rated design for demanding conditions

### Optimizing Access Control and Monitoring System with HMI Technology

Axiomtek has proposed its GOT315W-521, a 15.6-in WXGA TFT multi-touch fanless panel computer with an IP65-rated front bezel, projected capacitive touch and 400 nits of brightness, ideal for use in multimedia kiosks

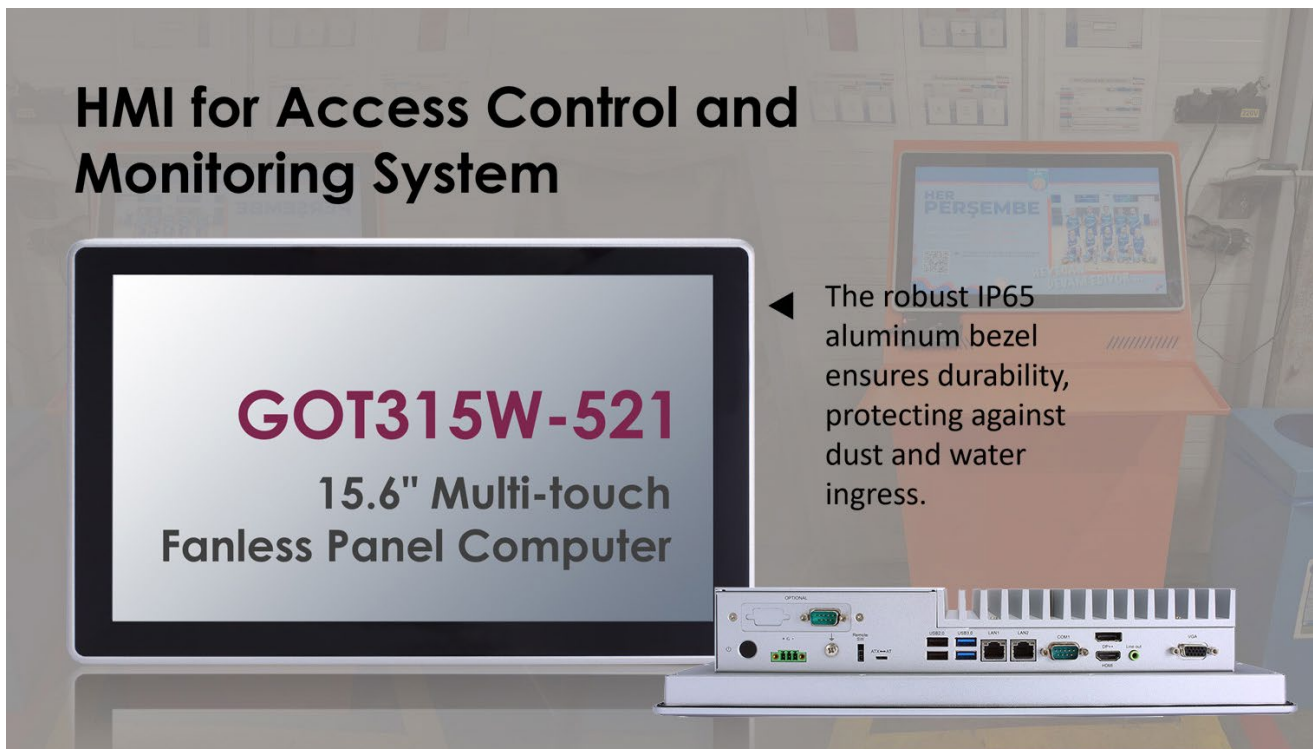


or as an HMI in factory automation, petroleum refinery, oil pipe monitoring, natural gas provider, and process industry.

The GOT315W-521 features powerful performance, rich I/O connectivity, great expansion, slim form factor, and fanless operation design which pave the way for good integration and optimization at the site. It also has a wide operating temperature of 0°C to +50°C and up to 1G vibration endurance. Panel mount, VESA mount, and wall mount are supported for various application needs.

## Application

### Boosting Security and Efficiency with HMI-Driven Access Control System



In its pursuit of a more secure and efficient workplace, the customer has integrated GOT315W-521 into its Access Control and Monitoring System (ACAMS). The advanced Human-Machine Interface (HMI) played a pivotal role in upgrading the company's security infrastructure, allowing for better management of personnel access, real-time monitoring, and streamlined workflows across the factory floor.

Its versatility allows for seamless integration into existing infrastructures, while its ease of installation and flexible expansion capabilities make the GOT315W-521 an ideal solution across a broad spectrum of industries. Whether for manufacturers, machine builders, or system integrators, this HMI provides a scalable and adaptable solution that enhances operational efficiency and supports the growing needs of modern industrial environments.

### **System Configurations of the GOT315W-521**

- 15.6" WXGA projected capacitive multi-touch widescreen
- Support for LGA1151 Intel® Core™ i7/i5/i3, Intel® Pentium® Gold or Intel® Celeron® processor
- Supports WLAN module and antenna (optional)
- 2.5" SATA HDD/SSD
- 2 LAN, 4 USB, 2 COM, 1 HDMI, 1 DisplayPort, and 1 VGA
- IP65-rated aluminum front bezel
- Supports panel mount, VESA mount, and wall mount

### **Why Axiomtek**

Axiomtek's industrial panel computers offer outstanding solutions that meet the unique demands of industrial environments, providing an optimal balance of ruggedness, high performance, and user-friendly features. The GOT315W-521 stands out as a prime example of Axiomtek's commitment to delivering robust, high-performance solutions that enhance operational efficiency.

"The GOT315W-521 exceeded our expectations in both functionality and ease of integration. Its advanced features and robust build have streamlined our access control and monitoring processes, allowing us to achieve greater efficiency and reliability. We're confident this solution will continue supporting our operational needs for years," said the Purchasing Manager of the customer.

### **About Axiomtek Co., Ltd.**

Axiomtek has experienced extraordinary growth in the past 35 years because of our people, our years of learning which resulted in our tremendous industry experience, and our desire to deliver well-rounded, easy-to-integrate solutions to our customers. These factors have influenced us to invest in a

growing team of engineers including software, hardware, firmware, and application engineers. For the next few decades, our success will be determined by our ability to lead with unique technologies for AIoT and serve our key markets with innovatively-designed solution packages of hardware and software – coupled with unmatched engineering and value-added services that will help lessen the challenges faced by our systems integrator, OEM and ODM customers and prospects alike. We will continue to enlist more technology partners and increase collaborations with our growing ecosystem who are leaders in their fields. With such alliances, we will create synergy and better deliver solutions, value, and the expertise our customers need.

Axiomtek is a Member of the Intel IoT® Solutions Alliance. A global ecosystem of more than 800 industry leaders, the Alliance offers its members unique access to Intel technology, expertise, and go-to-market support—accelerating the deployment of best-in-class solutions.