

Customer Stories

Smart Card Terminal for Construction Workers



About UNION biometrics

UNION biometrics is a global leader in biometric security, delivering comprehensive, high-performance access control solutions and premium multi-modal recognition devices built on proprietary technologies and patented anti-spoofing methods, protecting critical infrastructure, corporate, and government facilities worldwide through a trusted global partner network.

Overview

The adoption of electronic card terminals in the construction industry was driven by the need to ensure transparency in employment, guarantee retirement benefits, and accurately track working days for short-term and daily workers. Paper-based reporting often led to omissions or falsifications, reducing the effectiveness of the retirement benefit system. To address this, the government introduced a digital attendance system, and UNION biometrics has launched smart card terminals that require construction workers to fairly and accurately record their working days at job sites.

Challenge

On construction sites, workers were often experiencing underreported or omitted working days, which was reducing their retirement contributions and preventing them from receiving full benefits. At the same time, site managers were struggling with the heavy burden of manually tracking attendance for a constantly changing workforce, where paper records were frequently being lost or recorded inaccurately. Contractors and employers were also facing incomplete or unreliable reports from subcontractors, which was causing repeated verification, wasted time, and even legal risks.



Customer
Hyundai E&C



Partners
-



Industry
Construction



Location
Hyundai E&C Domestic
Construction Site



Product/Solution
UBio-X Slim/ T-500

At a Glance

T500



M400



High Durability

Extended Mobility

Minimalistic & Compact

Smart Data Management

Fast Wireless Charging

Flexible Authentication

-Certified with IP55 and IK66, ensuring reliable performance in outdoor environments

-Equipped with a high-capacity battery, optimized for portable use

-Slim and lightweight design for easy operation and handling

-Enables automatic data storage with secure server transmission

-Delivers maximum efficiency for reliable operation

-Supports fingerprint, smart card, and mobile card verification

Solution

To comply with *Article 13, Paragraph 4 of the Construction Workers Act*—which requires employers to verify working days through the use of electronic cards—Hyundai E&C adopted our T-500 terminal. The T-500 supports both smart card and fingerprint authentication, ensuring accurate and transparent tracking of workers' attendance and enabling fair workforce management in line with government regulations.

Understanding the dynamic and challenging conditions of construction sites, the T-500 was designed with flexible installation options. It can be deployed as wall-mounted, portable, booth-type, or gate-type units, allowing seamless adaptation to different environments and operational needs.

Through this project, we delivered Hyundai E&C a comprehensive workforce authentication and attendance tracking solution, ensuring compliance, efficiency, and fairness on-site.

Value Delivered

By implementing the T-500 in compliance with *Article 13, Paragraph 4 of the Construction Workers Act*, Hyundai E&C successfully established a reliable and transparent system for tracking construction workers' attendance. The solution not only ensured legal compliance but also improved efficiency and fairness on-site through flexible deployment options tailored to dynamic construction environments