# THE FUTURE IN AUTOMOTIVE SOFTWARE

WITH AUTOCRYPT



#### **ABOUT AUTOCRYPT**

As a pioneer in automotive cybersecurity, AUTOCRYPT envisions a future where connected cars and roads operate seamlessly with software-driven systems and infrastructure. With decades of expertise in encryption, authentication, and threat detection technologies, AUTOCRYPT secures both internal communications within the vehicle, and external communication endpoints for vehicle-to-everything (V2X), Plug&Charge (PnC), and mobility services.

With UN Regulation No. 155 and 156 taking full effect in July 2024, automotive OEMs and suppliers are obligated to adopt standardized cybersecurity software and practices to stay compliant and receive Vehicle Type Approvals. AUTOCRYPT employs a holistic approach to help clients achieve this goal efficiently, implementing solutions optimized for their specific environments and needs.



100%

V2X security stack for all Korean C-ITS projects



60+

patents filed globally



5,000km

of smart roads secured by AutoCrypt® V2X



50 million

vehicles embedded with AutoCrypt® IVS by 2028

#### WHERE WE ARE



#### **OUR BUSINESS**



In-Vehicle Systems Security



Automotive Cybersecurity Testing



Automotive Cybersecurity Consulting



PKI for Vehicles



Vehicle to Everything Security



Security Credential Management System



Plug&Charge Security



Charging Station Management System

#### **OUR HISTORY**

#### 2007-2014

- Developed Korea's first automotive safety diagnostic device
- Developed police car telematics system with encryption technology
- Developed secure V2X technology based on IEEE 1609.2:2013 the introduction of AutoCrypt® V2X
- Implemented Korea's first V2X security technology in testbed

#### 2015-2018

- Developed firewall for smart cars the introduction of AutoCrypt® IVS
- Developed misbehavior detection function based on machine learning
- Landed contract as the sole V2X security provider for all Korea's C-ITS development projects

#### 2019-2023

- Founding of Autocrypt Co., Ltd., spinning off from Penta Security Inc.
- Established security infrastructure for charging electric vehicles the introduction of AutoCrypt® PnC
- Landed first contract for V2P-based Android platform for Telco K
- Landed first contract for ECU security project for Company M
- Landed first contract for V2X certificate system for Company D
- Landed first contract for security testing project for new vehicle models for Company H
- Closed Series A with \$15 million, closed Series B with \$25.2 million
- Established regional subsidiaries in Europe and North America

#### 2024

- · Launched comprehensive automotive cybersecurity testing platform for UN R155/156 and GB compliance
- Joined Bayarian state-sponsored R&D project to improve EV charging infrastructure and security
- Designated as Technical Service (TS) by RDW Netherlands, becoming only cybersecurity TS in APAC region

#### **MEMBER ASSOCIATIONS**





























#### **AWARDS**



2019

Best Auto Cybersecurity Product / Service

2020

Automotive Tech Company of the Year Finalist

Automotive Cybersecurity Product of the Year Finalist





2020-2021 Automotive Cybersecurity Company of the Year

Automotive Cybersecurity Solution of the Year

Ride Hailing Innovation of the Year



2024 SDV Experts Winner



2021 Forbes Asia 100 to Watch







# AUTOMOTIVE CYBERSECURITY FOR REGULATORY COMPLIANCE



#### **Automotive Security Testing**

AUTOCRYPT provides a cybersecurity testing platform and tools based on the requirements of ISO/SAE 21434 and UN R155/156.

#### AutoCrypt\* CSTP

Cybersecurity Testing Platform for fuzzing, pentesting, functional testing, and vulnerability testing, generates standardized reports for VTA

#### AutoCrypt® Security Fuzzer (for HIL)

Smart and automated fuzz testing software, deployable in hardware-inthe-loop (HIL) simulations

#### AutoCrypt® Security Analyzer

Software composition analysis for vulnerability detection and license management in open-source automotive software

#### · Testing Service

Fuzz testing, penetration testing, and functional testing services provided by AUTOCRYPT's in-house engineers



AUTOCRYPT's in-vehicle systems security solution offers a full range of advanced security software, embedded components, and add-ons that are adaptable to both AUTOSAR and legacy environments.

#### · AutoCrypt® IDS & vSOC

Intrusion detection system, policy management, and security operations center

#### AutoCrypt\* HSM

Embedded security firmware for ECUs

#### AutoCrypt\* TEE

Trusted execution environment for advanced applications

#### · AutoCrypt® ASL

Adaptive security library for AUTOSAR

#### · AutoCrypt® TLS

Advanced encryption algorithms for automotive communications



With over a decade of experience in automotive cybersecurity,
AUTOCRYPT provides professional consultation and training services
for OEMs and Tier 1 suppliers to exceed regulatory compliance and
meet requirements for Vehicle Type Approval. Such services include
TARA (template available as a Siemens Polarion add-on), CSMS
establishment for UN R155, and cybersecurity testing.



**Production Key** 

AUTOCRYPT utilizes its proprietary PKI technology to securely control access to each vehicle component during manufacturing.

### **V2X Security & C-ITS for CAVs**

By utilizing its proprietary encryption and authentication technologies, AUTOCRYPT provides a comprehensive V2X security solution.

#### · AutoCrypt® V2X-EE

Security module and local certificate manager, embedded into V2X end entities to enable them to join in the V2X PKI ecosystem

#### AutoCrypt\* V2X-PKI

The V2X PKI system, adaptable to all three major SCMS standards (US SCMS, EU CCMS, China C-SCMS)

#### AutoCrypt® MBD

Misbehavior detection and monitoring integrated into V2X PKI operations

#### · AutoCrypt® IMS for SCMS

Integrated management system for V2X PKI certificates and operations

#### AutoCrypt® CLS

Smart edge server connected to RSUs and roadside sensors, enabling sensor data analysis and direct V2I communication

# **SECURE COMMUNICATIONS** FOR SOFTWARE-DEFINED MOBILITY

#### **Charging Station Management**

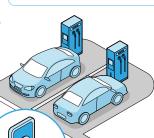
AUTOCRYPT establishes PKI and real-time management systems to secure and simplify the electric vehicle charging process for both end users and charge point operators.

#### AutoCrypt® CSMS

Provides a convenient way to manage charging infrastructure and operations through a secure GUI platform, fully compliant with OCPP 2.0.1

#### · AutoCrypt® PnC

Secures the Plug&Charge process during electric vehicle charging, allowing secure authentication and billing based on ISO 15118-20







## **Mobility Platforms**

AUTOCRYPT provides a comprehensive and secure mobility platform, AutoCrypt® MOVE, that can be customized and branded for MaaS providers and operators. The solution covers service planning, application development, security integration, and maintenance and optimization.

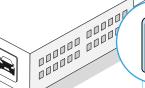


#### **Teledriving**

#### AutoCrypt® RODAS

A teledriving solution that provides a failsafe for autonomous vehicles, allowing an authorized operator to take remote control over the vehicle when an unexpected situation arises





#### **Digital Key**

AUTOCRYPT builts Digital Key in compliance with CCC standards, enabling secure and seamless entry while protecting vehicles from unauthorized access and car thefts.



# AUTOCRYPT

SEOUL MUNICH IRVINE BUSAN TOKYO SHANGHAI WUXI SINGAPORE TORONTO