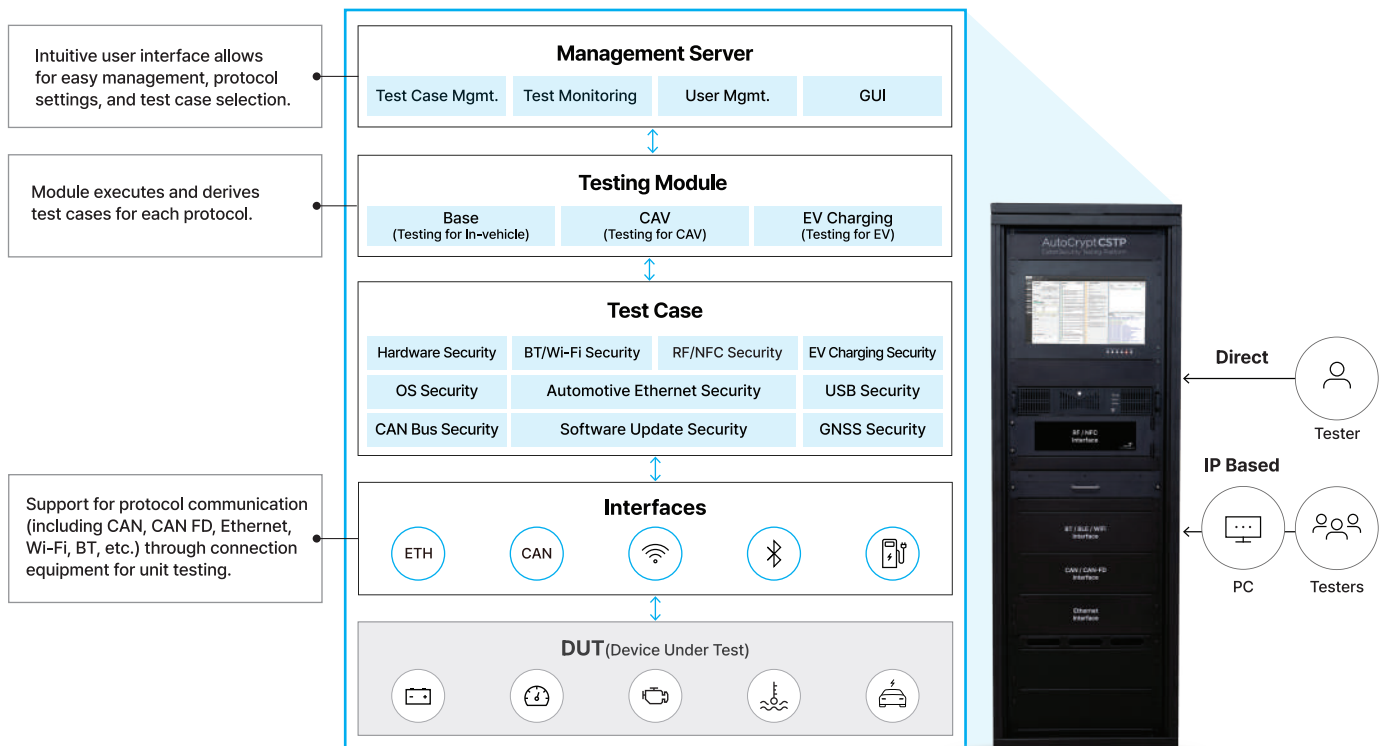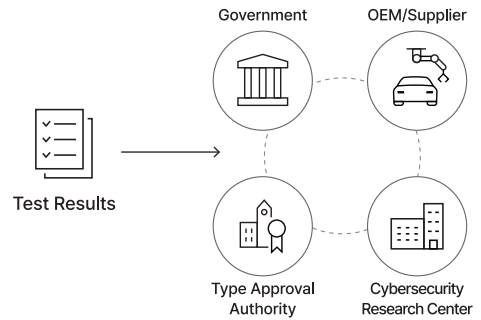# AutoCrypt® CSTP

Comprehensive cybersecurity testing platform

AUTOCRYPT provides an advanced and integrated platform with proprietary test cases, tailored to UN R155 and GB compliance, enabling a streamlined process for Vehicle Type Approval.

AutoCrypt® CSTP is a highly versatile and automated platform that runs a full range of automotive cybersecurity tests in accordance with the requirements of ISO/SAE 21434, UN Regulation 155/156 and SAC's GB standard. It is designed to support a full range of ECU types and communication protocols including ETH, CAN, CAN FD, RF, Wi-Fi, Bluetooth, and V2X.

The platform generates comprehensive reports that group testing results by test cases, allowing for easy result sharing with OEMs, suppliers and Vehicle Type Approval authorities.

Test Results

Government | OEM/Supplier
Type Approval Authority | Cybersecurity Research Center

Intuitive user interface allows for easy management, protocol settings, and test case selection.

Module executes and derives test cases for each protocol.

Support for protocol communication (including CAN, CAN FD, Ethernet, Wi-Fi, BT, etc.) through connection equipment for unit testing.

Management Server

| Test Case Mgmt. | Test Monitoring | User Mgmt. | GUI |

Testing Module

| Base (Testing for In-vehicle) | CAV (Testing for CAV) | EV Charging (Testing for EV) |

Test Case

Hardware Security	BT/Wi-Fi Security	RF/NFC Security	EV Charging Security
OS Security	Automotive Ethernet Security		USB Security
CAN Bus Security	Software Update Security		GNSS Security

Interfaces

ETH | CAN | | |

DUT (Device Under Test)

Direct

Tester

IP Based

PC | Testers

Supported Tests

- Penetration Testing
- Functional Testing
- Security Validation Testing
- Fuzz Testing
- Vulnerability Testing

AutoCrypt CSTP offers proprietary test cases mapped out for compliance requirements. Users can select individual test cases from the list provided, based on their vehicle type, system type, specification, and environment.

Automated testing features enable continuous and uninterrupted testing throughout the entire test process.

Professional Services

- Engineering Service
- Consulting Service

AUTOCRYPT provides customized test cases optimized for the client's systems and environment, along with penetration testing training.
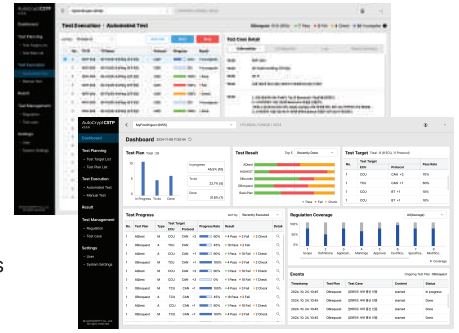
Cybersecurity consulting is also provided to help clients implement streamlined testing and reporting for Vehicle Type Approval.

AutoCrypt CSTP Compliance

Comprehensive vehicle testing designed for optimizing the compliance process.

🔵 Key Features

- **Project-Level Test Management:** Manage test plans and results for each project unit defined by the user

- **Interface Configuration:** Provide hardware configuration suitable for the protocol interface

- **Test Planning:** Configure desired test environment by Test Target, Test Case, and Test Type

- **Test Configuration:** Customize test conditions in detail for execution to match the test environment

- **Test Case Regulatory Information Support:** Provides international standard information linked to test cases

- **Real-Time Monitoring:** Real-time monitoring screen to check test execution status

- **Integrated Report Generation:** Offers comprehensive test results and detailed reports
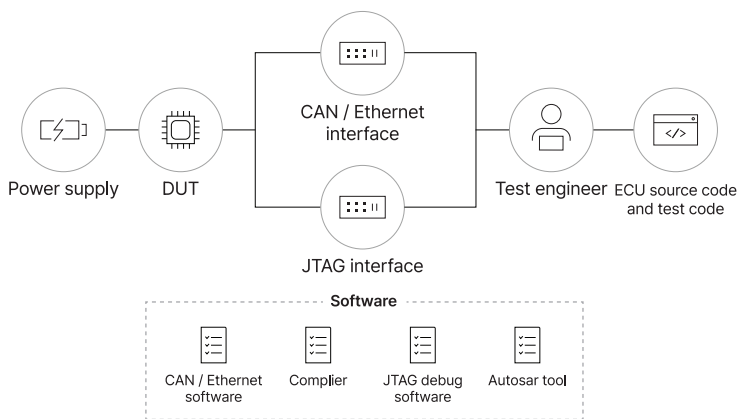
🔵 Highlights

- Standard-based test coverage by adherence to international standards and regulations, including ISO/SAE 21434, UN-R155, SAC's GB

- Adaptable licensing options, according to testing objectives

- Flexible scalability with custom test cases, according to specifics of vehicles and environments

- Comprehensive report support, consolidating all test results at the Test Case level

AutoCrypt CSTP Functional Tester

Customized testing and precise analysis tailored to vehicle environments, providing security validation to meet OEM requirements.
Test results are delivered in certification-grade reports.

🔵 Proprietary Security Sensor

- **Step 1:** Connect the ECU and Functional Tester
- **Step 2:** Configure for CAN and CAN-FD communication
- **Step 3:** Identify the test case to be executed
- **Step 4:** Initiate the functional test for the ECU
- **Step 5:** Verify test results

🔵 Highlights

- Simplified testing through integrated platform, combining interfaces, debugging tools, build systems, source and test code.

- General security testing, with design documentation and ECU hardware samples for mass production

AutoCrypt CSTP Fuzzer

AWS Foundational Technical Review (FTR) Approved

aws Qualified Software

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

🔵 Common Features

- Continuous Multi-ECU Testing
- Failure Retest Functionality

🔵 Supported Protocols

- **UDSonCAN / UDSonCAN-FD**
  - Specialized Test Case Modeling
  - Automatic ECU Status Recovery
  - Accurate Diagnostic Services Acceptance
  - Advanced Evaluation Logic

- **VehicleCAN / VehicleCAN-FD**
  - Exclusive Support for Vehicle CAN Protocol
  - Custom Test Case Generation
  - Vehicle CAN-specific Fuzzing

AUTOCRYPT