What is the CANoe Test Package EV?
The CANoe Test Package EV is a library of powerful test cases. This is used to test conformance and interoperability of e-vehicles (EV) within the standards CCS and GB/T. CANoe Test Package EV covers the relevant test scenarios, is up-to-date at all times and clearly structured. The execution and editing of test cases is embedded in a tool workflow with vTESTstudio and CANoe. Due to the simple handling of the tools and the seamless tool chain you achieve reliable test results very efficiently. Depending on the hardware used, which can also be from third party vendors, the execution of test cases is possible in different development stages:
> from initial ECU tests - including remaining bus simulation at component level
> up to the testing of complete vehicles on system level.

Overview of Advantages
> Comfortable selection and execution of test cases
> Automatic test execution and report generation
> Fast generation of an executable test environment
> Easily extendable test cases for individual tests
> Openness for the connection of additional test hardware

Highlights 3.0
> Test cases according to test specification GB/T 34658 for the Chinese charging standard GB/T are available to the full extent
> Further expansion of test cases for ISO 15118

Application Area
Fully automated conformance and interoperability tests according to specifications of the CCS, GB/T and CHAdeMO* charging standards.

Functions
> Implementation of test cases with test tables and CAPL
> Adaptation of the test cases to the System Under Test
> Selection and visibility of variant dependencies (PICS/PIXIT)
> Traceability to the requirements from the protocol specification
> Support of the CharIN interface to connect third party hardware
> Consideration of the CharIN Design Guide

* available with later product versions

Tool workflow:
The test cases generated by CANoe Test Package EV are implemented as projects in vTESTstudio. The test execution itself is performed in CANoe. The „Generator Tool“ is used to create a new CANoe configuration that contains the test cases ready for execution at the same time as a vTESTstudio project is created. After a change to the vTESTstudio project, a Test Unit is created, which in turn is integrated into CANoe and started directly. The test result is logged in a test report.
Generator Tool
At the push of a button, the 'Generator Tool' of the CANoe Test Package EV creates either a test unit containing the conformance test or a complete sample configuration that can be adapted for testing a real SUT.

Requirements
> Software
Sending and receiving messages while the test cases are executed is based on the additionally required CANoe options CANoe.SmartCharging and depending on the standard:
> CANoe.Ethernet for CCS
> CANoe.J1939 for GB/T.
The test cases are created with vTESTstudio. Any adaptation of the test cases to an existing test environment or to the System Under Test therefore requires vTESTstudio.

> Hardware
For the execution of test cases at component level, the control of the Vector hardware interfaces are already directly integrated:
> VT7870 for CCS
> VT2004A and VT2816 for GB/T.
The integration of additional power hardware for testing at system level is possible by means of predefined interfaces.

Supported Standards
Currently test cases from DIN 70122, ISO 15118, and GB/T 34658 are available. Test cases for IEC 61851 and CHAdeMO will be available step by step with later product versions.

More information: www.vector.com/canoe_tp_ev

User-friendly test execution with CANoe (DIN 70122 example).