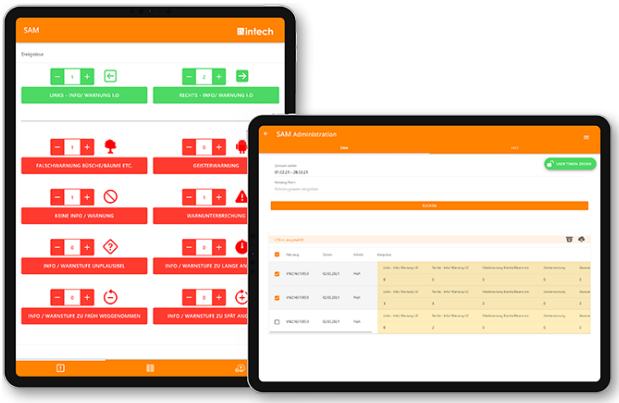
CAN Newsletter Online

TEST DRIVER ASSISTANT

Monitoring test drives

The Safety Assistant Monitor (SAM) application by In-Tech is a digital “co-driver”, which documents all test results of the in-vehicle driver assistant systems during a test trip.



SAM records the driver-assistant systems’ data during a test trip (Source: In-Tech)

Formerly, during a test trip, the assistance of a co-driver was mostly required for recording and evaluation of the test results. The SAM application logs the tested values automatically and evaluates the results afterwards comparing them with available statistics. “Using SAM, the car manufacturers can save the expenses for a co-driver. The software is already successfully deployed by some of our customers”, reported Tobias Wagner, the director at In-Tech. The application is platform-independent and can be used in the online as well as in the offline mode.

Tests for such functions as lane change assistant or drowsiness detection can be configured by few mouse clicks. SAM runs during the trip on a tablet located in the driver’s field of view. On exceeding of the configured thresholds, a warning is displayed. Thereby, the tablet connects via an SSL-encrypted WLAN link to a Raspberry Pi board installed in the vehicle. The Pi CAN FD module of the board communicates with the in-vehicle CAN networks and passes the data to the tablet. In the online mode, the tablet synchronizes the data via a 5G/LTE connection with a central Cloud database. The stored results are worldwide-accessible using a web-based application on a PC. Data evaluation, creation of test reports, and error statistics is possible. Further driver assistance scenarios can be integrated due to the modular software structure.

In-Tech offers the SAM software for use as a customer-adaptable subscription service. During the subscription run-time, the company guarantees the hardware availability and provides technical support.

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