

CAN Newsletter Online

SOFTWARE DEVELOPMENT KIT

NMEA 2000, support for Isobus, and updated CANopen library

Epec (Finland) has released SDK 4.1 including Epec Multitool 6.9. This SDK (software development kit) introduces, for example, support for Isobus AUX-N function, NMEA 2000 update, and an updated CANopen library.



Source: Adobe Stock)

The Isobus VT (virtual terminal) library has been updated to support Isobus AUX-N functions. This feature is used to control the implement's functionalities with Isobus auxiliary control devices e.g. joystick. Functionality has been pre-tested using AEF conformance test revision 2020/R03. For AUX function implementation guidelines, Epec provides a programming and libraries manual. The Isobus VT library now also supports "Move to another VT" functionality. This feature can be used to move the UI (user interface) to other another terminal in environment containing multiple VTs.

A NMEA 2000 tab has been added to the unit configuration window in Multitool. The tab is similar to the J1939 tab, but contains the NMEA 2000 standard PGNs. The NMEA 2000 specific Fast-Packet transfer protocol message sending has been added to the J1939 library. The added feature is included in all products except the S-series, where it will be taken into use when the devices are updated next, explained the company.

CANopen library updated

The Codesys 3.5 CANopen library has been updated to better support CANopen responder units. For responder units that don't send bootup/heartbeat messages, the library can now detect the unit from the CAN network by polling it with SDO messages. An adjustable delay has been added before starting the configuration. This is to allow configuration of responder units that are not ready to receive the configuration even if they already send preop heartbeat messages. The possibility to select what happens if a responder replies to SDO with abort has been added. These settings will be added to Multitool UI in SDK 4.2, but they can already be adjusted in the user application. Like the NMEA 2000 ones, these changes apply to Codesys 3.5 devices except the S-series, where the library version will be taken into use when the devices are updated next.

Analog input overcurrent protection block and the corresponding code template have been changed in EC44. Overcurrent is now diagnosed if the analog input reaches its maximum value. Previously the scaled analog value was used for the diagnostic. This caused problems if a sensor's output went over 21 mA in normal use. The same feature will be taken into use in the S-series when the products are updated next. Additionally, updated runtime is available for the 6000 series devices. The device can now be programmed with Codesys 3.5 SP16 patch 2.

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