

CONTROLLERS AND HMIS

## Safe control for harsh environments

**Epec (Finland) unveiled the SL84 safety control unit and the display unit 6505. The company also enhanced its 6112 display unit and updated the Epec SDK tool.**



*SL84 safety controller for applications up to PL d and SIL 2 (Source: Epec)*

SL84 is a functional-safety controller intended for typical machine safety functions e.g., prevention of unexpected movement or safety-related stop. Software-based safety functions up to PL d (performance level) according to IEC 13849 and SIL 2 (safety integrity level) according to IEC 61508 can be implemented. The unit offers two CAN ports supporting a wake-up via CAN. Possible CAN-based higher-layer protocols include CANopen, CANopen Safety (EN 50325-5), and J1939. The unit includes a 32-bit multi-core safety CPU (central processing unit) and memory protection for the application. The IP69K-rated controller is designed for extreme environments. It provides an aluminum enclosure, Leavyseal connectors, EMI (electromagnetic interference) protection, and withstands shocks and vibrations up to 100 g. The company offers pre-certified safety libraries and software tools for development of customized applications.

The Epec 6505 with two CAN ports is a 5-inch programmable touch-screen display and HMI (human machine interface) for various machine applications. CANopen, J1939, and NMEA 2000 are supported. The device includes the 800-MHz i.MX6 Solo CPU with the Linux operating system. It is programmable with Codesys Visualization or Qt/C. The company's Multitool is used for configuration. The Epec CANmoon tool enables diagnostics functions.



*Epec 6505 provides controller functionality programmable via a 5-inch display (Source: Epec)*



*Epec 6112 unit is available with WLAN connectivity (Source: Epec)*

The Epec 6112 12.1-inch display unit is equipped with the WLAN (wireless local area network) connectivity. The HMI dedicated for mobile machines offers an industrial grade capacitive (PCAP) touch-panel with a full glass front design. It embeds the iMX6 CPU with a graphics unit (GPU). The IP67-rated device offers two CAN ports supporting CANopen, J1939, and NMEA 2000 higher-layer protocols.

The manufacturer developed the SDK 3.9, Multitool version 6.7, which can be downloaded from Epec's Extranet. Main features include support for the recently introduced products such as the SL84 safety control unit and the WLAN-capable Epec 6112 display. OD back-up functionality for S/E series products and methods for saving RAM memory were added. This tool version offers a new project file format but is still capable to open projects in older formats.

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