

CAN Newsletter Online

HANNOVER MESSE 2018

CAN-related announcements

The Hannover Messe is the world's leading trade fair for industrial technology. Attendees can find a range of technical innovations throughout the whole value chain – from automation to supplier solutions.



The German Federal Chancellor Angela Merkel at last year's Hannover Messe (Photo: Hannover Messe)

All key technologies and core areas of industry – from research and development, industrial automation, IT, industrial supply, production technologies, and services to energy and mobility technologies – can be found at the Hannover Messe 2018. It takes place from 23 April to 27 April 2018 in Hanover, Germany. Various companies announced its CAN-related products.

HMS Industrial Networks shows its [CAN interface cards for Classical CAN and CAN FD](#) in hall 8, stand D31 while ESD Electronics also showcases its [multiple CAN FD interface cards](#) in hall 9, stand F17.

Dunkermotoren (hall 15, stand D10) is also part of the fair with its [BG 95 dPro CANopen](#). This is a drive based on a brushless DC motor with an output power of over 1 kW. The product with integrated control and power electronics can provide 1100 W continuous mechanical output power and has an integrated CANopen interface for integration into a CANopen network. With voltage variants from 24 V_{DC} up

The CMP-8270 pressure sensor from Trafag (Photo: Trafag)

to 60 V_{DC} the drive is able to excel in a range of applications.

Trafag (hall 11, stand E44) was able to extend its lead through the CMP 8270 CANopen pressure transmitter in an even smaller miniature design. It complies to CiA 301 and CiA 404. Trafag also shows its other CAN-related products.



The CANopen pressure transducer from ADZ Nagano (Photo: ADZ Nagano)

The CANopen pressure transducer from ADZ Nagano (hall 11, stand B49) comes in an IP67-rated stainless steel diaphragm and semiconductor thin-film technology, suggesting its use in most areas of industrial applications. The transmitter's temperature range is from -40 °C to +125 °C. The CAN controller meets the requirements of the 11-bit identifier base frame format as well as the 29-bit identifier extended frame format.

The WV58MR rotary encoder by Siko (hall 9, stand F82) is a magnetic rotary encoder with redundant position detection, custom-designed for use in mobile machines. It can be employed in safety-critical applications up to Performance Level (PL) d. Due to its particularly design of an optional redundant CANopen or CANopen Safety interface it is suited for heavy-duty use in mobile machines. Combined with wire-actuated encoders, the WV58MR can also be used for linear position monitoring.

Hydrotechnik's (hall 23, stand B19) analog CAN box is an adaptor for the conversion of the output signals of four analog sensors into the CANopen format. This allows increasing the number of analog input channels of the Hydrotechnik Multisystem measuring instruments. It is available for sensors with 0-mA-to-20-mA and 4-mA-to-20-mA output signals.



The WV58MR rotary encoder from Siko and Hydrotechnik's adaptor (Photo: Siko / Hydrotechnik)

Soga (hall 27, stand L6) shows its CANopen-featured servomotors with integrated drive and Shenzhen CO-trust Technology (hall 9, stand A34) its also CANopen-based servo drives. Teco Electric & Machinery (hall 15, stand H41) provide a frequency converter series, which provides communication interface modules for Devicenet and CANopen.

With the ES05 Essential Valve System series, Aventics (hall 23, stand C39) offers a solution for applications with regular requirements in industrial automation. All fittings are of the same type and tightened with the same torque. Users can integrate the valve series without any additional requirements into all standard automation architectures. Thus makes the networking advantages of the Internet of Things also available to normal pneumatic applications. CANopen and Devicenet are supported.

With its PC Kuhnke Scout control and operation panel, Kendrion Kuhnke Automation (hall 9, stand D18) presents a Codesys-based machine control unit with touch screen user interface. The IP65-rated display is available with a screen size of 7 inch, 10,4 inch, or 12,1 inch. On special request, the unit can be equipped with up to four dedicated switches allowing direct activation of specific machine functions. CANopen and is available for fieldbus connection. In addition, the unit is equipped with eight I/Os and one additional expansion slot. System memory include a 64 MiB flash disk, 32 KiB retentive memory, and one SD Card slot.

The 8-inch 4:3 SVGA control panel computer APPC 0842T from Nexcom (hall 9, stand D15) comes with flush panel design and can



Aventics' ES05 valve series and the displays from Kendrion Kuhnke Automation (Photo: Aventics / Kendrion Kuhnke Automation)

The Cable Drums by FSG Fernsteuergeräte Kurt Oelsch (hall 9, stand H33) can be used to measure the length, inclination, and speed depending on the version. A further application is the possibility of transfer the supply voltage and measuring data via the measuring cable. They are mainly used for the measurement of telescopic arms and telescopic booms in cranes and lifting platforms as well as for the control of stage constructions in the event technology. The length and inclination values can also be measured with digital transducer systems and read out in data type CANopen, also in redundant version for security-relevant applications, e. g. SIL2 according to IEC 61508.

The HIT 1000 inclination sensor by Hydac International (hall 23, stand C29) is capable of detection of inclination angles for mobile machinery in two axes. This is for example required for the safe leveling of machinery as well as the monitoring and if necessary the active control of leveling during operation. The sensor is based on a multi sensor system. The movement/acceleration compensated measurement system combines the measurement values from six measurement variables (degrees of freedom). Via the CANopen Safety protocol, the measurement data can be transmitted to the high level controller. The sensor is suitable for use in safety circuits according to the requirements of Functional Safety of Machines and Systems up to SIL 2 (IEC 61508) and PL d (ISO 13849).

The amplifier module SD7 from Wandfluh (hall 23, stand C17) serves as drive for proportional valves and (in the case of the 1-solenoid version) has one, or (in the case of the 2-solenoid version) two pulse-width- modulated current outputs with superimposed dither signal. Being able to be snapped on to top hat rails in accordance with EN 60715, it is suitable for applications in the industrial field. Instead of an analog interface, all types are also available with fieldbus interface such as CANopen and J1939. Apart from the 24 V_{DC}-version, a 12 V_{DC}-version is available.

These companies also exhibit its CAN products, just to mention a few: Intec (hall 14, stand L12), Murrelektronik (hall 9, stand D06), Seneca (hall 9, stand G24), Deutschmann (hall 9, stand D68), Schlegel (hall 11, stand C50), Sensor-Technik Wiedemann (hall 11, stand E40), Faulhaber (hall 15, stand H29), Parker Hannifin (hall 23, stand C37), Turck (hall 9, stand H55), and way more. These are by far not all CAN-related products, which are expecting us. On the exhibition site you can find an overview. The fair starts soon and we are excited about everything else to come.

have IP65 front for industrial applications. It supports fieldbus communication in automation market with optional Devicenet, CANopen, and other serial interfaces. It also supports Jmobile PC runtime to become HMI.

The I/O distribution box Dataeagle X-treme IO 2730 from Schildknecht (hall 8, stand D33) transforms a wired sensor into a wireless sensor. Together with its counterpart, the gateway, wirelessly integrates sensor measurements into the control unit or into the cloud. The product is designed to be the optimal interface between sensors and control unit. CANopen, and Devicenet are supported.



The Dataeagle from Schildknecht and Cable Drums from FSG (Photo: Schildknecht / FSG)

[CW](#)