



DIGITAL I/O MODULE

Enhanced functionality



Bachmann electronic provided the DIO280 digital input and output module with an extended range of

functions: The integrated counters and outputs for pulse width modulation (PWM) provide the device with a number of new and interesting application options. It comes with 32 digital inputs and 32 digital outputs, as well as 16 digital channels that can be configured as either inputs or outputs. Eight of these freely configurable channels could already be used as interrupt sources. These can now be configured via the SolutionCenter into four full-featured 32-bit counters, for either up or up and down counting. The integrated PWM function is an absolutely new feature: These can be used, for example, to operate valves economically. The period duration can be set as required between 500µs to 1s with a freely selectable mark to space ratio. Once configured, the signal is always active as soon as the appropriate output is triggered.

▶▶ 41479 at www.ien.eu 

GATE ARRAY

Configured in the field



CLPA (CC-Link Partners Association) presents a new Field Programmable Gate Array (FPGA) solution and the

launch of CC-Link Energy. There will also be details of the Gateway to China business development program and displays showing how CC-Link is being used in vertical industries such as food and beverage, consumer packaged goods and water. CC-Link allows field devices from many different manufacturers to be integrated onto the same control network and to communicate freely. Organisations wanting to make CC-Link compatible products or to use CC-Link as a control solution can join the CLPA, as can relevant researchers and academics. Field Programmable Gate Arrays (FPGA) are integrated circuits that can be configured by users 'in the field', rather than during their manufacture. This allows bespoke and customized solutions to be easily realized.

▶▶ 41490 at www.ien.eu

INTERFACE MODULE

Series connection of safety switches



The new interface module PDP20 F 4 mag from **Pilz** can be used for series connection of safety switches, such as tongue interlocks or magnetic safety switches, up to PL e. As such, it provides a standard-compliant solution in accordance with EN ISO 13849-1. The interface module can be connected to

dual-channel evaluation devices (such as the popular PNOZ safety relays, PNOZmulti configurable safety relays, PSS safety PLCs). Up to 4 switches can be connected to each module. PDP20 interface modules also offer a high level of decentralisation due to the ability to cascade modules. Each module features 4 dual-channel inputs and 2 solid-state safe outputs (OSSDs), 1 diagnostic solid state output and 2 test pulsed outputs. To cascade multiple modules, the OSSDs of one are fed into one of one of the dual-channel inputs of the next module.

▶▶ 41492 at www.ien.eu

HANDHELD PANEL

Weights 950 g



The main features of the HBG 0811 handheld panel from **Sigmathek** is its light weight of 950 g that enables hours of fatigue-free operation, plus an

operating system-independent HMI-Link technology. This makes it possible to transport all data over a single cable solution up to 100 meters. Because the operation panel does not have its own processor, it can be used for several hours without heating. The user can tune the CPU performance to the application in the control cabinet. On the 8.4" touch screen with LED backlight and SVGA resolution (800 x 600 pixel), also complex visualization tasks can be implemented. The ergonomically designed grip of the panel provides operating comfort for both right and left-handers. The panel has all the safety-relevant elements such as a three-stage confirmation button, emergency stop as well as a key switch.

▶▶ 41493 at www.ien.eu

INFRARED DETECTORS

For extreme environments



Infrared sensors from **EGE** are suited for material detection in

applications where standard sensors fail due to excessive ambient temperatures. Depending on the model, the units are designed to cover a maximum of 50...2,000 °C. They react to the energy radiated by hot bodies. Featuring switching outputs, the ODMO series includes many models with various switching temperatures and angular fields. A robust IP68/IP69K stainless steel housing protects the lens and the electronics, enabling the sensors to reliably detect hot workpieces at ambient temperatures of up to 75 °C even in wet environments. The ODML series is suitable for installation where the electronics must be protected from excessive heat. It consists of special fiber optic cables and easily exchangeable auxiliary IP67 lenses, enabling the physical separation of sensor and electronics.

▶▶ 41480 at www.ien.eu

MULTITURN ENCODERS

Use in larger drives



The patented Intelligent-Scan-Technologie of the F-Multiturn encoder family from **Kübler** has now been

used in an encoder of the 58 mm standard type, thus allowing its use in additional applications with higher bearing loads. The variants with hollow through shafts of up to 15 mm will make it possible to use them for larger drives without causing any problems. The singleturn resolution reaches up to 17 bit, the multiturn resolution up to 24 bit, so that the encoder achieves a total resolution of 41 bit. A stable zinc die cast housing and the robust Safety-Lock bearing design will ensure reliability not only on the mechanical side, but also on the electronic side, since both the singleturn and multiturn functionalities are completely integrated into one OptoASIC. This makes the encoder 100% magnetically insensitive.

▶▶ 41491 at www.ien.eu