#### HOUSING SOLUTION FOR RASPBERRY PL



With the RPI-BC electronics housing, Phoenix Contact offers the first housing solution to accommodate Raspberry Pi single board computer (SBC). The housing, which features tool-free mounting, is suitable for Raspberry Pi adapter also enables the use of the

The housing provides additional prototyping boards or components which can be used to extend the scope of functions of the SBC. The housings with according to DIN 43880) can be mounted on a DIN rail or directly on the wall. Using a DIN rail bus, several modules can also development kits for the BC housing as an option for connecting the GPIO (general purpose input/output) interface.

The combination of protective housing and hobby developers an efficient complete solution for extending the Raspberry Pi computer to create an electronic module that suits the

**Phoenix Contact** T: 0845 881 2222 www.phoenixcontact.co.uk

# OPTICAL ROTARY TORQUE SENSORS FOR LOW TOROUE AND HIGH BANDWIDTH



echnology claims to : new benchmark ance standards for otary torque cers, with the launch igital ORT 230/240 series. These new optical

rotary torque sensors are suitable for applications when the demand is for low torque and/or high bandwidth, providing precise, dynamic measurement of rotary and static torque less than 100Nm and for bandwidths of up to 50kHz.

The new ORT 230/240 devices replace Sensor Technology's E200 ORT series, benefiting from all-new electronics that deliver significant gains in resolution, frequency response, reduced sensor current consumption and faster digital data throughput.

The high speed capability comes from an inherently low inertia, since the electronics are not fixed the shaft, while non-contact operation ensures a long and reliable life (backed up by Sensor Technology's lifetime warranty) with high accuracy. The optical operating principle also ensures excellent noise immunity.

Sensor Technology T: 01869 238400 www.sensors.co.uk

### **CENTRALISED MOTION CONTROL**

Siemens has added PROFINET connection to its SINAMICS V90 servo drive system, allowing for centralised motion control when paired with S7-1500 or S7-1200 based PLC



The addition of a PROFINET connection further enhances the functionality and flexibility of this drive system, enabling a wide range of motion control tasks to be implemented cost-effectively and conveniently. Other integration options include PTI, USS and Modbus RTU.

The SINAMICS V90 system comprises the SINAMICS V90 servo converter and SIMOTICS S-1FL6 servomotor. The system features eight converter frame sizes and seven motor shaft heights to cover a performance range from 0.05kW to 7.0kW for operation in single-phase and three-phase networks.

The SINAMICS V90 PROFINET version is equipped with an integrated PROFINET interface for linking the drive to an automation system via PROFIdrive profile. With integrated real-time auto tuning and automatic suppression of machine resonances, the system automatically optimises itself to achieve high dynamic performance and smooth operation.

Siemens

www.siemens.co.uk

#### **OPTIMISING AVAILABILITY AND CAPACITY UTILISATION**

B&R's APROL process control system makes it possible to monitor assets constantly. This helps reduce maintenance costs and downtime and optimise the availability and utilisation of machinery and equipment.

Process control systems deal with a multitude of assets that are often found in hard-to-reach locations. Failure of a single asset could bring an entire plant to a standstill. Continuous monitoring of plant equipment with APROL Asset Performance Monitoring (APM) allows operators to keep an eve on the asset's current operating data with targeted realtime parameters.



In addition to providing operators with vital information about a plant's assets, it can easily prevent downtime by identifying the level of fouling on a heat exchanger or a cavitationcritical operating point for a centrifugal pump.

The software blocks of the APM www.br-automation.com

functions utilise data that is already being collected via the process control system. Problems with assets are identified early by applying definable performance thresholds to measure-ment data.

As a global leader in industrial automation, B&R combines stateof-the-art technology with advanced engineering to provide customers in virtually every industry with complete solutions for machine and process automation, motion control, HMI and integrated safety technology.

**B&R Industrial Automation** T: 01733 371320

## DC DOUBLE-AXIS SERVO DRIVE FEATURES IP67 HOUSING

Parker Hannifin has unveiled Servonet DC, a double-axis servo drive built in a robust IP67-rated housing that permits use in challenging environments outside of the cabinet. Target applications include packaging machines and rotary tables where numerous drives and motors are present. The wiring of the double-axis (5A/10A or 10A/10A) Servonet DC system is fast and easy using the hybrid cable, which transfers the required power, control and communications signalling. What's more, all wiring changes are made on the machine via plug and socket Faston connectors rather than in the electrical cabinet, while the reduced number of connections also mean fewer potential failure points. The system is complemented by an extensive series of servo motors (rotary and linear), a power supply and interface module.

Servonet DC has been developed in response to growing demand for high quality yet cost effective solutions to multi-axis applications, where a number of drives are mounted in close proximity on the machine. Here, Servonet DC allows a decentralised approach to motion control functionality, which is executed by means of EtherCAT communication or, optionally, CANopen DS402. In turn, this provides the potential for considerable



savings in time and materials, while offering design engineers with the opportunity to reduce machine footprint. Indeed, as the power supply and interface module are the only additional components required in the cabinet, the electronics footprint is up to 70 per cent smaller than traditional centralised solutions.

Parker Hannifin

www.parker.com