



## Combined current and voltage module replaces two devices

Murrelektronik has developed a module that can process both analogue voltage and current signals, and has four individually configurable measuring channels. The MAS168 module is said to simplify installations, reduce wiring and save space by allowing a single module to be used where previously two would have been needed. It is claimed to be the smallest analogue module on the market.

Users can configure which of the four ports should be used for which signals. They can choose whether sensors are connected with a current range of  $\pm 4$  to  $\pm 20$ mA, or 0 to  $\pm 20$ mA. The modules can also process 0 to  $\pm 10$ V signals. The rugged, IP68-protected, potted modules can be used in tough environmental conditions. They offer M12 shielded connections and a functional earth to ensure that interference does not affect sensitive analogue signals. The modules can be integrated into AS-i networks, or daisy-chained. They can also be linked to higher-level fieldbuses via gateways. Once an application has been designed, it can be used in similar machines with different networks, simply by changing an interface, thus making installations independent of the fieldbus being used. Data and power are carried by unshielded, four-wire cables.

**Murrelektronik**  
0161 728 3133  
[www.murrelektronik.co.uk](http://www.murrelektronik.co.uk)

## All-in-one PLC and HMI has a 4.3" colour touchscreen

Unitronics has announced an all-in-one PLC and HMI with a 4.3" colour touchscreen. The Vision430's touchscreen and five function keys are housed in a flat fascia with an IP66/IP65/Nema4X rating, making it suitable for use in the food and pharmaceutical industries.

Onboard I/O can include digital, high-speed, and analogue points, including PT100/thermocouple and weight/pressure measurement inputs. Expansion modules support up to 512 local and remote I/O at distances of up to 1km. There are 24 auto-tuned PID loops to control temperature, level, and pressure.

Built-in recipe capabilities are supported by data tables that store the parameters needed to

control a process. Data tables also allow the controller to store data-logs to a micro-SD card, which can also store application back-ups and allows PLC cloning.

Communication options include Ethernet, cellular, and industrial protocols such as Modbus, DF1 slave, BACnet, J1939 and CANopen. A protocol utility allows the PLC to communicate using almost any ASCII protocol. It can be accessed directly via a mini-USB programming port, or remotely using GPRS/GSM/CDMA and other IP networks for data acquisition and program downloads. Supervisors can be notified of critical information via e-mail and SMS messages.



The accompanying VisiLogic software allows rapid hardware configuration, and PLC and HMI application programming. The software includes a library of drag-and-drop function blocks for complex automation tasks such as PID, and a free library of colour industrial images.

**Unitronics**  
00 972 3 39778888  
[www.unitronics.com](http://www.unitronics.com)

## Gigabit and PoE+ Ethernet switches handle tough conditions

Red Lion has announced a series of compact, DIN-rail-mountable, managed, Gigabit Ethernet switches designed to deliver high-speed performance in harsh environments where space may be limited. The N-Tron Compact NT24k switches have hardened metal housings and are said to provide industry-leading shock (200g) and vibration (50g) tolerance, with operating temperature ranges of

$-40^{\circ}$  to  $85^{\circ}$ C.

The switches incorporate Red Lion's N-Ring technology with 30ms recovery for rings containing up to 250 nodes, automatic configuration, and a backup-and-restore capability to provide plug-and-play operation in critical monitoring and communication applications. They offer a full set of management features and



security to simplify deployment. There are several versions including one with eight all-Gigabit PoE+ (Power over Ethernet Plus) ports and redundant 22–49V DC inputs, and a 16-port all-Gigabit model.

**Red Lion Controls**  
[www.redlion.net/NT24k](http://www.redlion.net/NT24k)

## 42mm-wide electronic breakers have eight 10A outputs



Block is offering a range of 42mm-wide electronic circuit breakers with eight electronically-protected 24V output channels, each with a maximum rated current of 10A. The Power Compact range also has a smaller

version in a plastic housing, called the Power Mini, with four channels and identical functions.

Both versions protect against overloads and short-circuits and are designed for safe switching of high-capacitance loads. The rated current can be set individually for each channel, reducing the number of product types needed, and saving space in wiring cabinets. The tripping current can be set for each channel using selector switches on the front. High peak starting currents are prevented because

the individual outputs are activated in a time-delayed and load-dependent manner. The breakers can be read and controlled remotely via a PLC and two digital I/O. This allows individual outputs to be switched from a central location, their status to be queried, and error messages to be analysed. Each output has a three-colour LED indicator as well as an on, off and reset button.

**Block**  
01621 850666  
[www.block.eu/en\\_UK/home](http://www.block.eu/en_UK/home)