Read–out

Readout
Ireland's Journal of Instrumentation & Control

read-out.net

Ireland's journal of instrumentation, control, and automation

Today's News Today!

IT'S IMPOSSIBLE

ON A COMPUTER NEAR YOU
READ-OUT.NET

**NEXT ISSUE
20 SEPT
2016**

Nobody knows!

## "I thought they had a plan!" – Junkers

At this stage it is difficult to say how automation will be effected. Ireland has always tended to be regarded (despite our best efforts) to be lumped in with Britain by many automation suppliers. In many cases Irish business is handled directly from Britain rather than within the country itself – despite the fact that not everybody in Britain understands that Ireland is different and not a smaller version of the British Market. There was also the problem of different currencies but that was a problem that pre-dated the introduction of the Euro.

Nobody really expected this result. So despite people saying that they had *"contingency plans"* in reality the answer to all questions is *"Nobody knows!"*

The puzzled words of the President of the European Commission **Jean Claude Junkers** sum up European frustration – *"I don't understand those advocating to leave but not ready to tell us what they want. I thought they had a plan"*

Arc Advisary's **Florian Gueldner** has written *"The impact could exceed the 2009 crisis for European companies, but ARC is actually less pessimistic. However, we think that the Brexit will hinder growth in 2016, 2017, and 2018. Overall, it is a difficult and challenging task to identify all the dynamics and even*
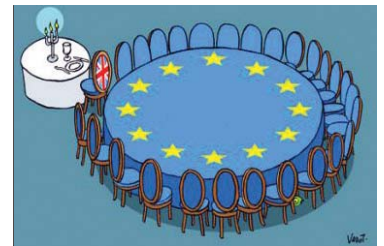
more to quantify them later."

Ireland is unique in that there is a land border with the British state and it is our biggest trading partner. The legal situation at present is that Britain is a fully paid-up member and will remain so until they activate Article 50 application. In reality Britain is being excluded already from important meetings for the first time in forty three years

What will happen? Ireland an Britain have had a mutual co-operation and passport free travel since 1928 – pre European Union. That is now all has changed. What exactly this will mean? *"Nobody knows!"*

Britain may become less attractive to foreign investors as it may be cut off from the single market. This will effect Ireland of course. Trade in both directions will probably suffer. *"Nobody knows!"*

In Britain international companies like Siemens have stopped major projects there. Certainties have become *"maybes"* or *"Don't knows!"*

The IET has said that the vote to leave the EU could result in a number of negative impacts on

Achievement recognised

Brendan O'Regan receiving his Cork Institute of Technology STEM Graduate Achievement Award from **Dr Guillaume Huyet**, Head of Dept of Physical Sciences. Far left, **Michael Loftus,** Head of Faculty of Engineering & Science. Far right, **Dr Hugh McGlynn**, Head of School of Science & Informatics.   (More people page 11)

Instrument TECHNOLOGY www.calibrate.ie

The internet of zombies!

Jonathan Wilkins, marketing director of obsolete components supplier, EU Automation, discusses the internet of zombies and advises on how companies can prepare for the outbreak!

Since Dawn of the Dead was first released in 1978, the possibility of a viral outbreak that will turn us all into night crawling, flesh-eating zombies has become a worry for many and a very prolific Hollywood theme. While it's unlikely this will ever happen, industry has recently started facing an epidemic across IT systems that companies should be aware of. The internet of zombies won't result in the end of civilisation, but it does put your company's confidential information at risk.

The term internet of zombies, was coined by cyber security solutions provider, Radware (www.radware.com) in its Global Application and Network Security Report 2015-16. The concept refers to the rise of an advanced type of Distributed Denial of Service (DDoS) attack, named Advanced Persistent Denial of Service (APDoS). This type of attack uses short bursts of high volume attacks in random intervals, spanning a time frame of several weeks.

In 2015, more than 90 per cent of companies surveyed by Radware experienced a cyber attack. Half of these were victims of an APDoS - up from 27 per cent in 2014. The report by Radware suggested 60 per cent of its customers were prepared for a traditional attack, but not an APDoS.

Typically, APDoS attacks display five key properties: advanced reconnaissance, tactical execution, explicit motivation, large computing capacity and simultaneous multi-layer attacks over extended periods. The attacks are more likely to be perpetrated by well-resourced and exceptionally skilled hackers that have access to substantial commercial grade computing equipment.

Hackers use virtual smoke screens to divert attention, leaving systems vulnerable to further attacks that are more damaging, such as extortion and theft of customer data. While the financial services sector is most likely to be targeted, almost anyone can fall victim to the highly effective attacks.

This type of attack is becoming increasingly common in retail and healthcare, where data is considered to be up to 50 per cent more valuable. As IT systems across different sectors become more automated, cyber security specialists are predicting these persistent attacks will happen even more frequently.

Businesses need to find new ways to fight the internet of zombies and can prepare for the outbreak by ensuring they're equipped to make decisions quickly at the first sign of a hack. Combining several layers of virtual protection with skilled professionals should be the first line of defence for information security.

Paying for additional capacity when developing a website can make the process costly; so many companies scale their system to match a predictable peak. However, in an APDoS attack, sites can experience ten or 20 times more traffic than their usual maximum so it makes sense to allow a healthy margin of error when developing a system.

Having a response plan in place will also improve the chances of restoring a system before any major damage is done. The plan should include preparing contact lists and procedures in advance, analysing the incident as it happens, performing the mitigation steps and undergoing a thorough investigation to record the lessons learned.

It's likely that zombie films will be as popular as ever in 2016, with another installment of Resident Evil on the cards. Let's make sure that the internet of zombies doesn't rear its head as well by preparing ourselves for the outbreak of APDoS that's heading our way.

www.euautomation.com

The ultimate adventure

John O'Sullivan, Engineering Director with **Douglas Control and Automation**, has always had a fascination with aviation and space, leading him to gain his PPL in 2003 and to study Astronomy and Planetary Science with the Open University. He was an unsuccessful candidate for the European Space Agency Astronaut Corps in 2008.
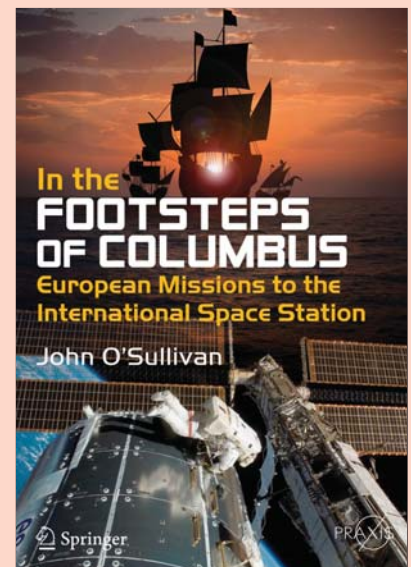
He has now published *"In the footsteps of Columbus"* telling the story of the ESA astronauts and their work on board the International Space Station over its first decade and how they have lived on board, helped construct the space laboratory and performed valuable scientific experiments.

ESA has contributed the Columbus science laboratory as well as the Copula, the Leonardo PMM and the ATV supply ship to the station's infrastructure but it is the human endeavour that captures the imagination. From brief visits to six month expeditions, from spacewalking to commanding the Earth's only outpost in space, ESA astronauts have played a vital role in the international project.

Extensive use of colour photographs from NASA and ESA depicting the experiments carried out, the phases of the ISS construction and the personal stories of the astronauts in space highlights the crucial European work on human spaceflight.

It is available from Amazon in Paperback or Electronic versions.

Alpha Drives Ltd.

Drives　　　　**Motors**　　　　**Gearboxes**

- **Performance**

- **Reliability**

- **Energy Efficient**

- **Services**

- **Support**
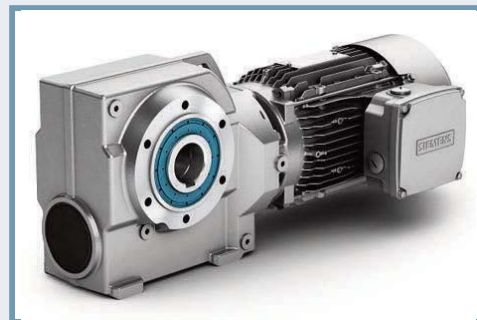
Creating reliable partnerships & laying foundations for efficient, flexible & intelligent solutions

sales@alphadrives.ie　　　www.alphadrives.ie　　　+353 (0)57 868 0800

FOLLOW US

On Twitter	On Facebook	On LinkedIn
ReadoutSignpost	ReadoutSignpost	Read-out Signpost News Group

Readout Registration Form

PLEASE COMPLETE DETAILS
OR CLIP YOUR BUSINESS CARD

1ST NAME:

SURNAME:

JOB TITLE:

COMPANY:

ADDRESS:

TEL NO: MOBILE   FAX NO:

E-MAIL ADDRESS:

FOILSEACHAIN READOUT PUBLICATIONS, CAORAN, BAILE NA HABHANN, CO GALWAY, IRELAND.
TEL: 087 2663282 • FAX: 091 506872 • E-MAIL: readout@iol.ie

YOUR INDUSTRY (Please Tick)

01 Pharma & Chemical Industry ☐
02 Consultant ☐
03 Contractor ☐
04 Education/Training ☐
05 Electronics & Electrical ☐
06 Engineering ☐
07 Food & Drink ☐
08 Foreign Inst Manf ☐
09 Public Services (incl Govt Depts, Unions, Hospitals) ☐
10 Instrument Manufacturer ☐
11 Instrument Sales ☐
12 Power ☐
13 Process Industry ☐
14 R&D ☐
15 Water & Waste ☐
16 Recruitment ☐
17 Publisher - Magazines ☐
18 Publisher - Books ☐
19 Exhibition Organiser ☐
20 Public Relations & Journalists ☐
21 Software Development ☐
99 Other Please give details: ☐

CATEGORIES (Please Tick)

01 Service Engineer ☐
02 Specifier/Consultant ☐
03 Supplier ☐
04 Manager/Director ☐
05 Inst Technician ☐
06 Inst Fitter ☐
07 Student/Apprentice ☐
99 Other Please give details: ☐

I WISH TO RECEIVE READOUT EVERY SECOND MONTH:

Are you involved in choice of purchase of instrumentation?
Yes ☐ No ☐

APPLICATIONS (Please Tick)
01 Process Control ☐
02 T&M ☐
03 Laboratory ☐
04 Environment ☐
05 Safety ☐
06 Quality ☐
99 Other Please give details: ☐

EMPLOYEE NOS (Please Tick)
1+ ☐ 25+ ☐ 100+ ☐ 500+ ☐

Member ISA   Yes ☐ No ☐
Member InstMC   Yes ☐ No ☐

Do you read other Instrument Journals?
Intech   Yes ☐ No ☐
Control Engineering   Yes ☐ No ☐
Instrumentation   Yes ☐ No ☐
Other (name)   Yes ☐ No ☐

Have you access to InterNet? Yes ☐ No ☐

My name may be used for mailings other than
Readout or Readout related mailings
Yes ☐ No ☐

T3 Readout cGraithe leis an gCoimisinOir Cosanta SonraT • Uimhir CGraithe 13008A • Readout is registered with the Data Protection Commissioner

Those who do not qualify for free distribution of
Read-out will be invoiced at the appropriate rate.

INITIALS: ....
DATE: ....

engineering in Britain, including exacerbating their engineering and technology skills shortage by making it more difficult for companies to recruit engineers from other EU countries, including Ireland.

Other issues identified include changes to access to global markets and companies, a decline in funding for engineering and science research, and a weakening of their influence on global standards.

In the area of Standards, there has been a gradual assimilation of standards between all 28 countries to a common European Standard in all sorts of areas. Standards, and many other activities are handled by European Offices which are based in various countries. (For instance we have just learned that the EU Office of Bank Regulation, based in London, will be moved to another European city.)

Engineering qualifications is another area where things may change. Will the EU recognise British qualifications and vice versa? Probably, but we don't know! As a straw in the wind we do know that the legal profession may be effected and the Law Society of Ireland has had an extraordinary increase in applications from British Lawers for affiliation as outside of the EU they will not be able to practice in European Courts. Will that apply to other professions?

As mentioned earlier Arc Advisory issued a short paper, in the immediate aftermath of the referendum result, on the effects of Brexit on the Automation Markets. It is worth a quick look.Florian Gueldner concludes his paper, 'All I can say at this point is, to quote the British writer Douglas Adams, "Don't Panic!"'
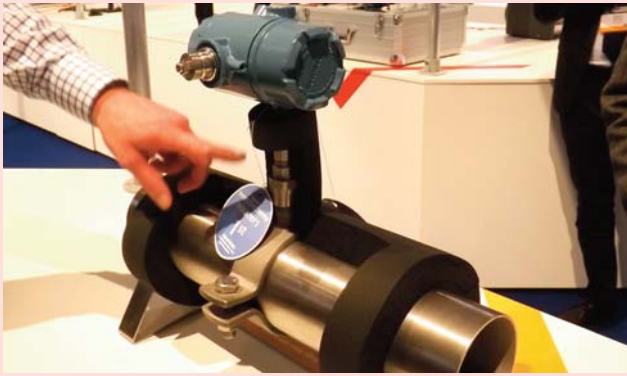
http://bit.ly/AutomationBrexit

NEW IN BRUSSELS

Notable at the recent Emerson Exchange event in Brussels was this industry first, the Rosemount X-well system, a wireless transmitter, accurately measuring process temperature without need for thermowell. This measurement is possible without requiring any intrusions or penetrations into the process, allowing for quicker and easier installation along with simplified long-term maintenance. Users do not have to design, size or maintain thermowells. Wake Frequency Calculations are eliminated, and time spent determining material compati-bility, the right insertion length and the necessary profile.

http://bit.ly/EPMXwell

Also the new Emerson Wireless Pressure Gauge created quite buzz among delegates. This new gauge design fundamentally will change how customers use pressure gauges by helping them make better business decisions!" It is another industry first. Does this signal the end of the Bourdon Tube?

http://bit.ly/EPMWlessPG

Calibration leaders

LotusWorks, a recent nominee in the Irish Laboratory Awards, are a technical and engineering solutions provider and one of its core businesses has been calibration services throughout 27 years of operations. *"Our Calibration Services offer a full suite to our customers and that's what makes us different"* says **Noel Molly**, Calibration Manager at LotusWorks. Plans to extend the INAB accreditation are on the horizon for LotusWorks in July this year allowing LotusWorks to add accredited Temperature Mapping to their bundled service offering.

LotusWorks prides itself on its people. *"100 vacancies have just been announced at LotusWorks and having talented people, finding more talented resources and offering apprenticeships enable LotusWorks promote itself as one of the accredited industry leaders"* says Noel. A Calibrations team of 18 are available every day for local mobile CALS in sectors such as Medical Device, Pharmaceutical and Life Sciences.

www.lotusworks.com

Transforming Processes

Alpha Drives Ltd., is a leading Distributor and Stockist of the Siemens range of Variable Speed Drive's, Motors and Gearbox Solutions.

Partnered with **Siemens** since 2003, their commitment to superior engineering and technology means they can offer turnkey solutions on all products including application design, supply from the largest stock's in Ireland, installation and commissioning by qualified engineers and highly comprehensive after sales service and maintenance.

The provide Variable Speed Drives, Motors, Gearboxes, Process Instrumentation, Energy Management & Automation Solutions to a broad range of industries including :

• *Water & Wastewater*
• *Pharma & Life Science*
• *Food & Beverage*
• *Utilities*
• *Plastic Moulding*
• *Extrusion*
• *Textile, Paper & Board Manufacturing*
• *Conveyor Technology*
• *OEMs*

The superiority of their systems and adaptation of new technology and equipment, means they continually provide future-proof solutions to increasingly demanding plant and machinery requirements. They offer a comprehensive range of services to complement the product range in order to provide their customers with an efficient single source service for their projects.

"Alpha Drives Ltd will take your business to the next level of innovation."

www.alphadrives.ie

Pharma alliances!

Zenith Technologies and *GE Healthcare's Life Sciences* business have announced a collaboration to support biopharmaceutical manufacturing deployment.

As part of the partnership, Zenith Technologies' methodologies, systems and libraries will be offered as a service to GE Healthcare's clients in bioprocessing. The combined offering aims at helping biopharmaceutical manufacturers increase productivity, improve efficiency and reduce costs.

The two companies will integrate process control systems, manufacturing execution system (MES) solutions and other supporting technologies with GE Healthcare's start-to-finish technologies and solutions for the biopharmaceutical manufacturing industry.

Jan Makela, general manager at BioProcess GE Healthcare said: *"The development of our KUBio modular manufacturing facilities and FlexFactory single-use manufacturing platform was fuelled by the need for customers to deploy biophar-maceutical manufacturing capacity more quickly and at a lower cost. "Implementing these advanced technology plat-forms requires automation expertise for which we partner with a number of world class companies. With Zenith Technologies' expertise in automation integration and customer support, we will be able to offer more choice to customers."*

Brendan O'Regan, founder at Zenith Technologies, said: *"This is a significant milestone in our development and ushers in a new era of opportunity for both companies. "GE offers an unprecedented solution to our pharma-ceutical customers to help rapidly deploy capacity and significantly reduce time to market. Combined with our manufacturing software systems and on the ground, global support services, we can help bio-pharmaceutical manufacturers improve their processes and ultimately increase their competitiveness." (See also News on CIT recognition of Brendan's achievements on front page).*

In other news we learn that Zenith Technologies and *Werum IT Solutions* have formed a global partnership to support pharmaceutical companies with the implementation of manufacturing execution system (MES) technology to improve production performance.

The collaboration brings together Werum IT Solution's MES PAS-X software, which is designed to increase efficiency, improve productivity and meet regulatory requirements during pharmaceutical manufacturing, with Zenith Technologies' ability to integrate systems and provide on-the-ground automation technical support. The PAS-X software is used by the majority of the world's top 30 pharmaceutical and biotech companies but also by many regional and mid-sized manufacturers.

Joe Haugh is new Chief Executive Officer (CEO) at Zenith Technologies. Brendan O'Reagan remains on as Executive Chairman..

www.zenithtechnologies.com/

Gas acquisition

The *Gasmet Technologies Oy*, one of the world's leading manufacturers of gas monitoring equipment, has acquired Quantitech Limited. Gasmet's products are employed globally in regulatory monitoring, process control and environmental/safety applications, and Quantitech has been its sales and service partner in Britain and Ireland since 1995.

(see also Appointments Section Page 11)

www.gasmet.com

Metering Pump

Blue-White®'s all New Proseries-M® MD-3 Chemical Metering Pump, provides Precision Chemical Metering for the Treatment of Municipal Water & Waste Water.

The Hybrid MD-3 Diaphragm Metering Pump has 2000:1 turndown, and provides smooth chemical dosing with no pulsation dampener required. With 380 strokes per minute, the Proseries-M® MD-3 provides a remarkably steady flow.

The MD-3 is built to provide long service life at high pressures and no pressure regulator is needed. The patent pending design is 50% more energy efficient than similar units now on the market. Straightforward all inclusive ordering: A single model includes all necessary components for installation. And the drop-in-place design of the MD-3, along with conveniently built-in controls, make installation and set-up fast and efficient.

The PVDF wetted end fittings allow for more than 14 inlet and outlet configurations. MD-3 is equipped with a Zero-maintenance brushless DC drive.

www.proseries-m.com

VSDs in Water!

A couple of decades ago the water industry could have been described as a bit of a sleepy backwater of the engineering world. But today it is facing challenges of epic proportions, ones that could change the world completely.

Variable Speed Drives are now one of the key technologies for ensuring success. The drive of the future then, to a certain extent, is here now, they can communicate wirelessly, an operator can visualise them within a system, monitor and control them securely via a mobile device, they will sort

Users in Brussels

Steve Sonnenberg, President Emerson Process Management (above) and **Roel VanDoren**, their President in Europe, in a joint presentation entitled *"New Reality, New Opportunity"* addressed the changes and challenges facing companies in the 21st Century during their user group meeting earlier in the year.. They did not talk about products or applications but on ways of doing things. Indeed during the presentation we tweeted: *"Emerson's approach – yes equipment, but more importantly perhaps is attitude or culture."* See our full report here:

bit.ly/1VGYfH4

problems out on their own, work incredibly efficiently at different speeds and loads, reduce maintenance costs and burdens as well as being easier to set-up as they are self-calibrating.

Mitsubishi Electric has just launched the FR-F800 series of intelligent variable speed drives for pump and fan applications, specifically designed to satisfy all these requirements for the water industry.

ie3a.mitsubishielectric.com/fa/en/solutions

Desk power/data supply

Schneider Electric has a new Desk Unit range. The advanced suite of products combines industry leading modular design flexibility, quality and ease of installation. The comprehensive range has been engineered for commercial and residential applications, to provide elegant and practical solutions for power and data connectivity at work stations. Effortlessly blending design with functionality, the new range can be fully customised and tailored to meet customer demands and easily retrofitted in order to account for their changing needs. The ease of installation, significantly reduces the time of install by up to 50%.

The new range comprises five core product families:
• IDU – In-Desk Units – facilitating unrestricted individual access to power, media and data right on the table or desktop
• PTU – Pop Up Tower Units – fit perfectly in any working environment. The range is ideal for integrating power and data connections in tiny spaces
• FDU – Flush Desk Units – an easily accessibly range for supplying electricity to workstations
• ODU – On-Desk Units – perfect for commercial installations such as meeting rooms, offices or desk sharing environments
• UDU – Under Desk Units – designed as a simple electricity supply unit for office workstations and permanently installed devices

http://bit.ly/SchneiderIrl

2 million magmeters!

Since 1977, Endress+Hauser has produced over two million electromagnetic flowmeters. That is more than any other manufacturer. "This magic number stands for high-quality measuring technology and, above all, satisfied customers in all kinds of industries," says Bernd-Josef Schäfer, Managing Director of Endress+Hauser Flowtec AG, the center of competence for flow measuring technology.

The company's success story as a manufacturer of electromagnetic flowmeters began in the middle of the 1970s. In order to enter the water and wastewater market which was emerging at that time, Endress+Hauser purchased the company Flowtec in Bern in 1977 and moved it to a new location in Reinach (Basel-Landschaft, Switzerland). This is where Endress+Hauser started to produce flowmeters with just three employees in former military barracks.

Work was done on an on-demand basis. "Whereas today," says Bernd-Josef Schäfer, "our production spans six sites around the globe – in Switzerland, France, the USA, China, India, and Brazil – and boasts state-of-the-art logistics. This infrastructure is what has enabled us to produce two million electromagnetic flowmeters to date in accordance with required quality standards."

To put this into context: These two million electromagnetic flowmeters could measure a volume corresponding to four times the flow rate of the Amazon. Each production site also features precise calibration facilities which are regularly checked by national accreditation bodies and which guarantee consistently high measuring quality for each individual device.

www.ie.endress.com

Digital Tools

Schneider Electric has launched a new Software as a Service offer -- Eurotherm Online Services (EOS). An integrated online platform and management tool for overseeing calibration records and regulatory status, EOS offers an automated, digitised process for easy collection and retrieval of critical process data – from shop floor to top floor - when and where required.

Jean-Pascal Tricoire, Chairman & CEO of Schneider Electric said: *"The extensive digitisation of industries globally is demanding highly connected solutions that deliver new capabilities to control industrial operations enterprise-wide, from the edge to the core. Customers are also demanding a new breed of applications and software that deliver real-time intelligence to the right decision-makers at the right time.*

"To meet this growing demand, Schneider Electric is launching a new wave of digitised and connected technologies designed to help reshape energy management and automation. EOS is one of our flagship field services solutions. This new cloud-based offer will enable process industries to reduce error-prone, paper driven processes by automating their instrument compliance procedures and planning – driving operations that are more safe, efficient, connected, reliable and sustainable."

Leveraging the online platform, EOS Advisor is a planning and scheduling tool that enables more efficient management of equipment and staff; meanwhile, the EOS eCAT™ tablet application improves calibration process efficiency with a secure, mobile-compatible tool that eliminates the drawbacks of paper-based records systems.

http://bit.ly/29a87qf

IS Tablet

Gavin O'Driscoll tells us that **Hanley Measurement & Controls Ltd** has taken delivery of their initial stock of the AEGEX Zone 1 and 21 certified windows 10 tablet. Several client orders were fulfilled (with positive feedback on product) and demo / short term trial stock is now in place.

The Aegex10 Intrinsically Safe Tablet became the first Windows 10 tablet to gain certifications for ATEX and IECEx Zone 1, UL 913 Class 1 Division 1 and CSA 22.2 areas of hazardous locations earlier this year. These approvals made the Aegex10 the world's first Windows 10 tablet certified for HazLoc operations where high concentrations of flammable gases, vapours or dusts are likely to occur in normal operation, such as in oil and gas, chemical manufacturing, and other industries with highly explosive environments.

While most mobile devices are not permitted in highly volatile zones of hazardous locations because they could cause a spark, Aegex's 10.1-inch tablets are certified intrinsically safe, or incapable of igniting an explosion. Aegex10 intrinsically safe tablets synchronise with an organisation's Internet of Things to allow users to transmit real-time data from within the most hazardous zones of their operations. Such cloud-based connectivity improves safety, efficiency and compliance and lowers risk, resulting in decreased downtime and optimised operations.

Gavin welcomes requests for a demo or on site trial. Call him on 086 2589893 and tell him Read-out sent you!

hanleycontrols.ie/

Radio loggers

New rugged, weatherproof radio data loggers – Plus Radio – are now available from Gemini Data Loggers, manufacturer of the Tinytag range. Marketed here through **Manotherm**, Plus Radio loggers are designed for monitoring in harsh outdoor, industrial and warehousing applications.

They work alongside Tinytag Ultra Radio loggers which are more suitable for indoor monitoring and both types of unit can be mixed and matched within a system.

Plus Radio offers a wide range of measurement and input options including temperature and RH. They provide monitoring for ambient, cold chain and cryogenic applications, as well as oven and process monitoring. Plus Radio loggers also offer low voltage, current and count inputs for use with third party sensors to record properties such as pressure, flow rates and footfall.

www.manotherm.ie

Series 500 Remote HMIs from R. STAHL HMI Systems are an ideal software and hardware package for operating current control systems in the process industry. Designed for safe and comfortable access to Emerson, Siemens, Yokogawa, Honeywell, Allen Bradley, ABB, Rockwell or Schneider control solutions, the Thin Clients are suitable for interoperation with both classic workstations as well as the ever more popular Virtual Machines (VMs).

VMs are increasingly used as host environments for control systems – especially in process plants with divergent control solutions, as they radically simplify the operation and maintenance of different systems and system genera-tions. For one, a VM is not subject to any hardware defects, which in the case of dedicated computers may lead to problems with repairs and spare parts supply. Instead, an identically replicated system running in another VM can take over in the case of a fault. Secondly, IT capacities can be more fully exploited with virtualisation, instead of remaining underused in individual workstations.

Resource efficiency is also a guiding principle for Series 500 components in their own right: in contrast to standard PCs, these Thin Clients are limited to the features required for their intended use. The Remote HMIs are available both as touchscreen models and with keyboards, and come with displays sizes ranging from 15" to 24" (WUXGA), with resolutions from 1024 x 768 to 1920 x 1200 pixels. They have an energy-efficient LED backlight, and their extremely robust design makes them suitable for operation in temperatures from -30 °C to +55 °C (+50 °C in permanent operation). As well as in rough environments, they can also and especially be operated in clean rooms. In addition to versions for standard industrial operation, models certified according to ATEX and IECEx for operation in zone 1, 21 and 2, 22 are also available.

Stahl products are marketed through **Douglas Control & Automation.**

douglas-esl.ie

High performance DDM

National Instruments has announced the NI PXIe-4081 7_-digit high-performance DMM and 1.8 MS/s isolated digitiser. The NI PXIe-4081 is the first PXI Express DMM available. It offers engineers the flexibility, resolution and isolation needed to tackle challenging applications that require smarter test systems in industries ranging from consumer electronics to aerospace and defence.

The NI PXIe-4081 is the industry's most accurate 7_-digit DMM, with an industry-leading 15 ppm accuracy for DC voltage measurements up to two years after calibration. It is capable of voltage measure-ments from nanovolts to one kilovolt and resistance measurements from microohms to gigaohms. A solid-state current shunt configuration offers eight DC current ranges from 1 µA to 3 A and six AC rms current ranges from 100 µA to 3 A. The DMM occupies a single 3U PXI slot and provides excellent channel density for high-channel-count systems, delivering 17 DMM channels in a single PXI chassis occupying 4U of rack space. For high-throughput applications, the isolated digitiser mode can acquire DC-coupled waveforms in all voltage and current ranges with a 1.8 MS/s maximum sample rate. By changing the digitiser sampling rate, engineers can vary the resolution of the digitiser from 10 to 23 bits for the perfect combination of speed and accuracy.

Engineers can use an interactive soft front panel for basic measurements and debugging automated applica-tions, which delivers all the ease-of-use expected from a traditional instrument. The driver software includes a best-in-class programming interface that works with a variety of development environments, such as C, Microsoft .NET and LabVIEW. The driver also features help files, documenta-tion and 28 ready-to-run example programs to assist in test code development.

"Customers often choose the PXI platform to lower their cost of automated test based on the accuracy, channel density and speed of PXI instruments," said **Steve Warntjes**, NI Vice President of R&D, Modular Instruments. "The NI PXIe-4081 builds on more than 20 successful years of NI PXI DMMs by providing a code-compatible migration option to PXI Express, extending the lifecycle of critical test and measurement functionality and doing it at the highest performance levels possible."

www.ni.com

Dew Point Kits

New configuration and diagnostics tool from Michell Instruments, marketed here by **Instrument Technology**, simplifies commissioning and maintenance of dew-point transmitters

The company has upgraded its diagnostic tool – the Universal Communications Kit - to enable users of their Easidew and Pura ranges to carry out on-site checks and reconfigure their dew-point transmitters simply and easily.

The upgraded tool comes with new application software which is backwards compatible with previous versions. This means users can use the upgraded tool with older transmitters, making it easier for service engineers who will not need to carry different pieces of kit.

The communications kit allows users to check and configure transmitters via application software installed on a PC. This allows maintenance engineers to:
• Digitally measure and display moisture and temperature readings for on-site transmitter spot-checking
• Reconfigure the transmitter output units, range and fault settings to match requirements of the process

The complete diagnostic tool is packaged in a convenient carry case and includes the software, USB cable and transmitter docking station. It is powered from a PC USB port, which, in turn, powers and receives a digital signal from the Michell dew-point transmitter.

itl.ie

Appointments

Andre Boyce is now Automation Manager at DPS Engineering.

Following the acquisition of Quantitech by Gasmet, Ken Roberts has been appointed as the company's Managing Director.

Owen Bonner has been appointed Chief Operations Officer - Business Banking Growth with the Bank of Ireland

At the recent ISA Ireland Section annual meeting John Murphy (left) was elected as President of the section and was congratulated by outgoing President Alan Bateman.

Some of the attendance at the ISA Ireland AGM. It was held in June 2016

Do you need to reduce your energy costs?

The new F800 Variable Speed Drive from Mitsubishi Electric has arrived, taking energy savings and motor control to a new level. The drive features many innovative functions that ensure accurate control, while also achieving energy efficiency figures of up to 98%. The new Advanced Optimum Excitation Control function ensures that the motor excitation current is constantly adjusted, leading to approximately 12% extra savings compared to a standard variable torque curve operation. The F800 is designed to be used predominantly with pumps and fans but is equally suitable for compressors and HVAC applications.

ie3a.mitsubishielectric.com