

NEW

**Automation
Products & Service**

Providing support
solutions for your
next smart control and
monitoring project

Innovation in Open Automation



APHASLAM

Industrial Electrical Equipment Specialists

AUTOMATION

INDUSTRY 4.0

As in all aspects of modern life, technology is transforming the world by generating opportunities that weren't available even a decade ago.

The Internet of Things (IoT) and web-connected devices are making processes more accessible and transparent.



Automation solutions bring huge benefits like increased productivity, quality and safety at low cost – and enable companies to remotely control their carbon footprint.

Smarter Design...

One of the great features of the Weidmüller range of automation products is their compact size and clever space-saving design. By reducing the amount of plastic and metals needed in manufacture, our engineers are mindful of the downstream consequences of your design choices.

Controllers

The core of any automation project is the Controller, historically the 'PLC', but for today's automation builder, new options with Weidmüller's award-winning Automation Controller (AC), you can offer localised machine control whilst providing ease of connection to on-site IT systems or, indeed, the Cloud via Node Red.

The IT programming landscape for industrial controllers has changed radically with the trend being towards more 'open source' web-based type controllers offering greater interoperability over different platforms.

Industrial Panel PCs (IPPC):

With an integrated touch screen, IPPCs are an excellent choice for certain machine and process applications where you want to integrate the machine control with the existing factory IT system.

Our industrial PC comes with the option of a Windows 10 licence, which not all manufacturers include, and integrating an industrial-grade touch screen in your control panel or remote station provides protection, ease of control and visualisation.



The U-control 2000 web has been awarded 'German Innovation Award 2020'



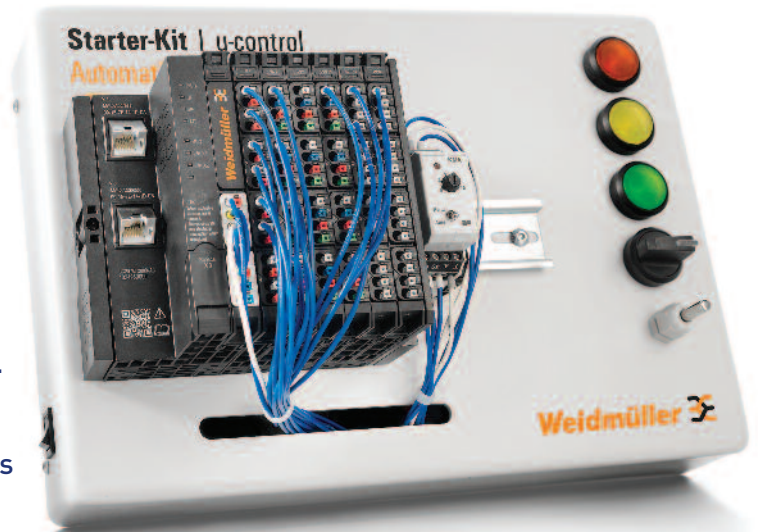
Weidmüller's next generation of high-performance Automation Controllers are designed to give you increased ease of access and control of your data with simplified programming and installation.

To see the benefits for yourself, book a Starter Kit for a trial evaluation – and experience the improvements in your data management with our solutions for digitalisation and automation.

GET YOUR STARTER KIT TODAY!

Phone **Seán Lynam**, our Industrial IoT Solutions Engineer on **+353 87 7599 257**

Or email him : sean.lynam@aphaslam.ie



Get started with an Automation Controller!

A few design pointers

- When undertaking a new automation project, or expanding an existing installation, it is essential to consider the ease of integration (in both space – and time).
- Does the functionality of the hardware meet the immediate requirements of the project in hand?
- Does it allow for ease of expansion at the right cost?
- Is the technology 'future proofed' using the emerging standards of today, and not tied to legacy platforms.
- Make sure that coding partners are essential members of your team.



YOUR CONTACT

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An Electrical Engineer by degree, Seán has experienced working with some of the largest companies in the technology and medical device sectors.

AUTOMATION

INDUSTRIAL PCs

Flexible implementation of visualisation, control and IoT applications.



SCALABLE PERFORMANCE

The different performance classes of the u-view IPCs and Panel PCs provide a broad selection of hardware for an optimal fit to your applications.

HIGH-QUALITY FINISH

The sturdy aluminium housings meet the highest quality requirements for industrial use and enable the passive cooling of IPCs and Panel PCs through intelligent heat management.

FLEXIBLE APPLICATION RANGE

u-view IPCs and Panel PCs are perfectly tailored for state-of-the-art visualisation, automation, and IoT applications and support Windows and Linux operating systems.

INDUSTRIAL PCs – PRODUCT RANGE

U-VIEW - INDUSTRIAL PCs (IPC)

Powerful hardware with scalable features for machine control, visualisation or IoT apps.

- Latest Intel Atom up to Core i7 processors
- Completely passive cooling for all power classes
- Wall and rail mounting supported

U-VIEW - INDUSTRIAL PANEL MONITORS (IPM)

The ideal monitor for your visualisation

- Multi-touch technology enables a new type of operation that offers new possibilities for visualisation and control tasks, e.g. two-handed operation
- The monitors share their high quality displays of the u-view HMIs
- The slim housings are ideal for installation and integration into modern machine designs.

U-View Industrial Panel PCs combine PC and Touchscreen Monitor in one unit

U-VIEW - INDUSTRIAL PANEL PCs (IPPC)

The ideal combination for your control or monitoring tasks

- Passive Cooling and Solid-State Drive, so no moving parts.
- Integral high-quality touchscreen for intuitive operation of the device.
- With a thermal output of 10 watts max, the processor has an optimum balance in computing power and energy efficiency.



U-View Industrial PCs and Panel Monitors can be optimally installed in separate locations

U-LINK REMOTE ACCESS SERVICE

Quick remote access for simplified maintenance and increased availability of machines and systems



SIMPLE OPERATION

Connect to your machine with just one click - without manual handling of VPN certificates or configuring VPN servers and clients.

SECURE SERVICE

Secure remote access in accordance with the recommendations of the German Federal Office for Information Security.

EXTENSIVE FUNCTIONALITY

Remote access including asset, user, rights and firmware management. The open device topology, as well as information export and clear dashboards, offer a wide range of functions.

SIMPLE AND SECURE PLANT ACCESS

u-link is the perfect remote-maintenance solution for machine construction companies and plant operators. Quickly, securely, and simply maintain a highly productive system, even without in-depth IT expertise.

U-LINK REMOTE ACCESS SERVICE

Secure and affordable assembly, even of comprehensive remote-maintenance topologies, allows the easy management of multiple plants and users.

- Intuitive operation and independent account administration
- Integrity thanks to an exclusive server and database instance per account
- Clear dashboard for troubleshooting
- Remote initialization of VPN-tunnel from service PC
- Logging connections ensure total transparency
- Security according to German Federal Office for Information Security recommendations.

INDUSTRIAL SECURITY ROUTER

Weidmüller's Industrial Ethernet Router ensures that different networks interoperate in unison and with top-level security.

- High-performance industrial security router with integrated firewall.
- Separation of networks e.g. for office and production level.
- 4G LTE Cellular internet connection.
- Secure remote access with VPN.



INDUSTRIAL ETH

INDUSTRIAL GRADE CONNECTIONS



Condition Monitoring

Rotating devices such as pumps, motors or gears are found everywhere in industry. Depending on the application and load, they wear out at different rates.

To avoid failures, which can prove costly in both time and money, these devices must be carefully monitored. Traditional manual monitoring or scheduled service, when not needed, is costly and may not be effective.

Automating this monitoring and applying predictive analytics to your maintenance scheduling will help to maintain smooth plant operation.

AP Haslam will supply you with the right solution to ensure that various parameters – such as power consumption or temperature values – are continuously recorded and evaluated.

Single Pair Ethernet (SPE)

AP Haslam recognise that the potential of Single Pair Ethernet is huge. Experts consider it to be the next generation of communication architecture in automation.

Originally developed for automotive applications, SPE is compact (2 wire), flexible and offers extensive reach – and provides a continuous connection from the sensor to the Cloud – essentially an extension of the Ethernet to the sensor.

With our extensive experience in providing CAT5/6 cable solutions, AP Haslam are ready to provide Irish Industry their SPE cabling needs as they embrace this state-of-the-art technology.





Shopfloor Analytics

Downtime and idle plant cost money! Whether a manual workstation or a fully automated robotic cell, production managers need to know how everything is working.

Without a central, simple overview of the production floor it can be very difficult and time consuming to see the potential for optimising the process.

AP Haslam has the solutions to help centrally visualise your production floor, displaying machine status and facilitating quicker reaction to downtime issues, immediately, whilst using historical data to plan for a more efficient process.

Industrial Ethernet

Data is the lifeblood of the SMART Factory. Secure, robust sensing and transmitting of data is critical for the digitalisation of industry.

Whether for a data centre or a production plant, AP Haslam provide an extensive range of the industrial ethernet hardware you need for your next digitalisation project.



Seán Lynam – Industrial IoT Solutions Engineer for AP Haslam – shares some of his thoughts on the automation market with Colin Sherlock of Electric.ie.

An Electrical Engineer by degree, Seán has experienced working with some of the largest companies in the technology and medical device sector.

“The key lesson I have learned over many years is that the quality of your components is critical to the long-lasting success of automation and process improvement.”

“The core of any automation project is the Controller, historically the ‘PLC’, but for today’s automation builder, new options with Weidmüller’s award-winning Automation Controller (AC), you can offer localised machine control whilst providing ease of connection to on-site IT systems or indeed the Cloud via Node Red.”

On the surge of smart phone apps – and young programming clubs like CoderDojo: *“The IT programming landscape for industrial controllers has changed radically with the trend being towards more ‘open source’ web-based type controllers offering greater interoperability over different platforms.”*

On use of industrial PCs, and in particular the use of Industrial Panel PC’s (IPPC): *“With an integrated touch screen, IPPCs are an excellent choice for certain machine and process applications where you want to integrate the machine control with the existing factory IT system.”*

“Our industrial PC comes with the option of a Windows 10 licence, which not all manufacturers include, and integrating an industrial-grade touch screen in your control panel or remote station provides protection, ease of control and visualisation.”

When pressed on the fact that most automated products and systems operate at an optimal level, Seán clarified: *“Whilst many associated technologies are impressive – and offer considerable benefits – you should research and understand what’s in the market before deploying them as part of your customer offering.”*

Seán reminds us: *“Improving machine and process automation has been a business objective since Henry Ford in the early 1900’s! What has radically changed over the last 10-15 years is the sheer volume of data needed to achieve the next step improvements in energy efficiency and predictive maintenance.”*

“No matter what industry you are in, robust and reliable architecture is essential for the collection, transmission and storage of data – whether on-site or in the Cloud.”

“Weidmüller not only provides the best control and connection hardware needed for your machine or automation project, but we also offer the analytics platform to both visualise and action your data.”

IO-LINK

IO-Link is a networking platform used to connect digital sensors and actuators to either a fieldbus or via Industrial Ethernet.

The two-way platform utilises the sensors/actuators to analyse sets of data and to permit optimisation of Industry 4.0 automated processes and operations.

IO-Link features

Simplified installation – IO-Link provides a IEC standard digital interface, so sensors and actuators are connected quickly – and without error – by using pre-assembled cabling.

Automatic parameter setting – Automated commissioning is made possible by web-based, tool-assisted, parameter sets.

Expanded diagnostics – IO-Link provides complete remote transparency down to the sensor/actuator level, enabling cable-break detection, precision diagnosis and simplifying device replacement, considerably reducing downtime and maintenance costs.

Weidmüller's IO-Link with u-remote is a flexible I/O system for faster planning and commissioning, either as a control cabinet system or placing directly in the field – providing operational freedom with all the advantages of a consistent overall system.



U-remote's easy-to-use configuration tool enables parametrization and configuration independently of the implemented field bus/network protocol.

With u-remote in IP67 – Users can increase the feed-in to the I/O system to 16 A, enabling larger number of consumers to connect to a line, considerably reducing the wiring required.

With u-remote IO-Link module in IP 20 – IO-Link devices can be integrated, parametrized or configured using the web-based tools. Additionally, project files can be archived, distributed, and modified locally.

The configuration is performed directly by the field bus coupler on to the **IO-Link Master** and subsequently on to the **IO-Link devices**.

What you get with Weidmüller IO-Link

- Connection for four IO-Link devices
- IO-Link standard according to IEC 61131-9
- Protocol support IO-Link v.1.0 and v.1.1
- Max. 20 m wire length
- Internal data width 4-32 bytes, configurable
- The peace of mind of AP Haslam Support

Call us today

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