You need flexible I/O systems for your facilities
u-remote offers more performance and reduces complexity
Let’s connect.

Remote I/O

u-remote: now with IP67

Weidmüller
Cost-saving and flexible system configuration

Easy to install


Faster commissioning

Improved operational availability

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**Machine automation with clear added value**

*u-remote* combines powerful technologies with short project durations

You want to perform your machine development operations – from the automation concept to the stable machine operation – in such a way that they are fast, high-performance, smooth and deliver identifiable added value for your customers. The decisive factors for your project’s success are consistently efficient processes and unique functions.

With *u-remote* you’re laying the foundation for this. By implementing powerful and easy-to-use signal connection components, you will reap early on the advantages for installation work, machine commissioning and subsequent service applications at your customers’ premises.

From planning to operation, *u-remote* allows you to speed up all work processes and opens up new possibilities in panel building. It is the perfect response to growing complexity in machine and factory automation thanks to its powerful flexibility and simple handling.

**Our formula:** “More Performance. Simplified. *u-remote*.”
u-remote – the perfect response to growing complexity
Discover the benefits of flexible system approaches

u-remote offers the perfect solution for all common areas of application within machinery construction. Whether it’s used as a pure panel system, in mixed IP20 and IP67 applications, or even positioned directly in the field for signal connection, u-remote grants you complete freedom to create a flexible I/O architecture and gives you the benefits of an integrated complete system.

One system, two protection classes – fully integrated
It is very rare for pure IP20 or IP67 signal connections to be needed in machine automation. With u-remote, you will find that I/O modules are connected directly to the panel system in a highly flexible, fully integrated and fieldbus-independent manner. Soon, you will no longer need to use expensive IP67 gateways, and you will be able to design your automation solution so that it is far more efficient and comes from a single source too.

Maximum efficiency in the panel
The only things that are large about u-remote are its savings potential and the system performance. With the most innovative I/O system on the market, you can plan your panels to be a whole size smaller. The modular set-up makes system design easier, and the installation process is speed up. u-remote not only makes your machines more affordable, but also more efficient in every respect.

High-performance decentralisation
As it is a small and multiprotocol-capable system, you can use u-remote wherever you need high performance directly in the field. Whether you’re communicating via an I/O-Link or transmitting unprecedentedly high levels of power, design your decentralised system architecture with u-remote so you are well-equipped for ever-growing automation requirements in the future too.

u-remote: now with IP67
Maximum efficiency in the panel

The only things that are large about u-remote are its savings potential and the system performance.
Smarter automation specified in a simpler way
u-remote simplifies your planning activities and offers unique functions

By coming up with new ideas and technologies and delivering the highest connection density on the market, we simplify the planning process for you and provide you with plenty of reserves for the future. Implement your customers’ requirements in a perceptibly simpler and quicker manner. u-remote changes the way you work for this purpose. Your system design is simplified. Your automation design is made more flexible. And your systems become more powerful.

Configured to be thinner
With a module width of just 11.5 mm, u-remote is thinner than any other I/O system. And because intelligent miniaturisation even creates space for more innovations, it now comes with up to 32 connections per module. So you have space left over for flexibility and solutions that save money.

More connections on a narrower width
Up to 32 connections on just one module – that’s got to be a world record! Connecting eight individually pluggable 4-conductor sensors in the tightest of spaces is child’s play. And you even reduce the number of I/O modules required for signal connection.

Simpler planning
Speed up your selection process: with a wide diversity of variants due to parameterisation, not a multitude of modules. For you, this translates into only one part number per module, a simplified module selection process and fewer spare parts stored on stock.

Unique separation
It’s a feature you’ll only find with u-remote: a separate I/O supply via two highly robust 10 A current paths. You reduce the planning effort, as you no longer have to perform any consumption calculations. Flexibly distribute the I/O modules according to the logical structure of your sensor and actuator architecture and save power-feed modules at the same time.
No space for efficiency losses
u-remote enables the most miniature of system solutions that deliver maximum performance

Handle your projects with maximum performance. u-remote speeds up your installation process and makes your machines start up faster. The seamlessly pluggable system means that you can rely on your intuition and trust that there will be no errors.

Consistent minimisation of errors
u-remote’s modular design makes for shorter machine start-up. The intuitive handling, seamless pluggability and single-row connection strip make your work easy and reduce cabling errors – even when you’re working at high speeds.

Direct insertion – direct savings
All you have to do is inserting the conductor into the clamping unit until it stops – job done. Our “PUSH IN” technology not only makes cabling twice as fast for you, but also offers you uncompromised connection safety.

Simply plug and go
The fastest way to productive operation: Connect sensors and actuators with pre-assembled cables. You save time, improve usage and handling and minimise the error rate. It’s ideal, especially for decentralised sub-assemblies and tight spaces.

Clear colours, clear functions
Easy working thanks to an innovative colour concept. You can identify all key functions at a glance and the coloured pushers guarantee intuitively correct working. The extensive range of marking options also reduce the error rate.
Notably improved production performance

*u*-remote significantly increases your machines’ operating availability

Score top marks from your customers with maximum machine availability. *u*-remote is the most user-friendly I/O concept on the market that you can use to combine high-performance automation with optimum system handling. This gives your machines a convincing range of functions, decisively minimising the time and effort involved in service and maintenance.

Minimise machine downtimes

The machine may be at a standstill, but communication is still ongoing: *u*-remote is completely hot-swap-capable. Replace the electronics without the need to switch off the I/O system. A safe solution to keep machine downtimes as short as possible.

Respond faster thanks to integrated diagnostics

The integrated *u*-remote web server enables startup in sections even before machinery is commissioned. Shorten production downtimes by making use of unique fast error identification with plain-text diagnostics.

Immediately identify errors

Error diagnosis has never been so easy: You can localise errors instantly with an LED directly on the channel and status indicators on every module. An indispensable benefit for secure commissioning and rapid system maintenance.

Smart support

Thanks to the printed QR code, you can access installation instructions and technical data online. The direct link takes you to all the key information about the scanned component.
Integrated safety for both people and machines

u-remote offers swift restart following a fault

Communicative systems such as u-remote form part of the future in factory automation. For safety, this means that even after triggering an emergency stop, it is still possible to call up the system’s current status – regardless of how big the safety application is.

With u-remote, a reliable machine shutdown is guaranteed while keeping the sensors active. And after maintenance, you can restart system operation immediately.

Integrated safety without a safety control

Implement safety solutions by connecting them to the control. All you have to do is simply position them directly upstream of the corresponding standard output modules. And that’s without the need for costly safety PLCs featuring appropriate outputs or the additional use of safety relays. By safely shutting down the output current path, you switch off actuators selectively and, at the same time, keep the sensors fully active. You can therefore send the machine status to the control at any time, and it quickly takes over the restart operation once the problem has been rectified.

• Unique on the market: u-remote safe power-feed modules
• Cascadability of safety circuits
• Safe switch-off of standard output modules

Safety control complex systems using modern fieldbus technology

Use u-remote to connect distributed safety equipment to form a fully cooperating safety system, which is monitored using a centralised safety control. You can ideally integrate the safe u-remote input and output modules in decentralised architectures to selectively switch off parts of the production as required.

• PROFIsafe modules for the PROFIBUS and PROFINET fieldbuses
• Fail Safe over EtherCAT (FSoE) is designed for EtherCAT
• Smallest possible safety I/O solution – highest functional density available
• Safe 4DI-4DO modules combine various safety functions on only 11.5 mm width
• Easy system configuration due to less variants of safe I/O modules
Automate production systems in an integrated way with multiple protection classes

u-remote allows for an integrated signal connection in IP20 and IP67
The growing decentralisation in automation requires more and more flexible solutions. The signal connection is established close to the sensors and actuators, meaning that fewer lines are required and less wiring work needs to be carried out. However, as it is not usually possible to establish pure IP67 connections, IP20 systems are still needed to be integrated.

With u-remote, you can now establish both IP20 and IP67 signal connections within a single I/O system. The innovative gateway module that allows for the direct connection of up to 15 I/O modules in the field means that separate and expensive IP67 fieldbus components become redundant. This tangibly increases the flexibility.
High-performance decentralisation
u-remote in IP67 for more flexible automation solutions
Higher performance and more flexible automation

u-remote simplifies system design in the field

u-remote’s new IP67 family combines all the field benefits offered by u-remote IP20 in a device with an increased degree of protection and is perfectly equipped for signal connection outside of the panel.

It demonstrates a high degree of flexibility in terms of the connection options with IO-Link and scores top marks with a variable power supply. Another impressive feature of IP67 is its multiprotocol capability. For you, this translates into less effort, fewer costs and maximum performance at the same time.

Active communication in the field

Use an I/O-Link to significantly improve your sensors’ and actuators’ parameter and diagnostic properties. You will find four type A and four type B ports each on one module in u-remote. These firstly enable connection of actuators of up to 2 A. Each port can be configured as an input or an output too.

Adjust a protocol instead of swapping a module

Whether you’re using PROFINET or EtherNet/IP, u-remote’s multiprotocol function allows you to plan a remote I/O family but still lets you remain flexible in your choice of fieldbus.

Usable around the globe

u-remote offers you maximum flexibility as regards connectivity. For the power supply, opt for either a 7/8” connection or an M12 connector with L-coding.

Higher performance – less effort

Increase your I/O system’s feed-in to 16 A with u-remote and, as a result, connect even more consumers in a line and thus significantly reduce the time and effort needed for wiring.
High performance wherever it’s needed
u-remote cuts an impressive figure due to its robustness, compact design and low weight

Decentralising machine automation can prove challenging for I/O systems’ mechanical properties. Indeed, they should offer high performance. But at the same time, they must remain robust, small and as light as possible, so they can be put to good use on moving machine parts.

u-remote meets these requirements with a sophisticated complete concept, which means the innovative system can be put to widespread use.

Robust design
The IP67 modules from u-remote measure up to the most stringent robustness requirements. The fully encapsulated zinc die-cast enclosures prove extremely reliable wherever resistant signal distributors are needed.

Top performance despite temperature fluctuations
As an IP67 system, u-remote is well-protected against water and particles and can be used in a temperature range of -20°C to +70°C.

Productivity in a very confined space
Measuring 30 mm and 60 mm wide, u-remote can be installed both in confined spaces and on common profiles. What’s more, the modules are counted among the smallest in their class and are a good 20% lighter than similar rival products on the market.
Simpler planning, faster operation
u-remote simplifies your processes
Quick and error-free start-up is becoming increasingly important in the area of modern machine construction. Process sequences need to be simulated before the final machine commissioning, and decentralised I/O solutions need to be tested for correct functioning. Inputs and outputs need to be checked to ensure that they perform correctly, and configurations need to be implemented and parameters set. These tasks are usually performed using special software tools, which are used to test the performance of the application and to check that the remote I/O station has been installed correctly. These tools are also used to diagnose and locate process errors during subsequent operation, in order to ensure that repairs are carried out as quickly as possible and without any long downtimes.

With u-remote, powerful software for start-up, status monitoring and error diagnosis is already integrated in the I/O system. The software is accessed via the web server installed on the fieldbus coupler, making it accessible via any standard Internet browser. The I/O station can be parameterised before a control unit is even connected, and status information and diagnostic and process data can easily be accessed on the station. Settings can also be directly changed, tested and stored for subsequent series installations.

u-remote makes it really easy to start up, parameterise and carry out diagnostics on the remote I/O station via an Internet browser. It is a particularly time and cost-efficient system, and there is no need for any special hardware or software.

Convenient parameterization and fast plant servicing
The u-remote web server speeds up start-up and maintenance work

Status monitoring and diagnostics
Whether on site via USB or via remote access with a fieldbus interface - the u-remote web server means that you can access system status information or diagnostics results at any time. The information can be easily viewed via web browser without the need for any special hardware or software, which helps to create transparency and to make error diagnostics and rectification easier.

Simpler installation tests
The option to force inputs and outputs means that processes and procedures can be simulated even if a PLC is not connected, thus allowing for multiple work steps to be performed in parallel. This significantly reduces the amount of time required prior to machine startup, while also allowing for installation errors to be identified at an early stage.

Quick series configuration
The parameterisation of your u-remote station can be stored as a file and then uploaded in order to be transferred to other u-remote stations. This significantly reduces the configuration time required for series production, while also preventing input errors. Useful tool tips help you work out what information to enter. 

Intuitive thought
The new web server design stands out thanks to its extremely user-friendly operation. The clear structure makes it easy to access all of the system functions, and the swipe functionality makes for simple navigation on mobile touch-operated devices.
Simplify your system planning processes and prevent configuration errors
The u-remote configurator supports your engineering process

A superior tool for your planning process: Assemble your complete I/O system the quick and easy way with the u-remote configurator.

From the DIN rail, over the coupler, to the modules, the configurator offers you the best practice variation or alternative system components upon request – always perfectly coordinated to your application.

Save yourself time and effort:
• Complete system configuration via one interface
• Automatic testing of all the planned stations
• Display and rectification of configuration errors

Save yourself work
Naturally included in our professional planning tool: For a better overview, you can display the dimensions, product information and comments on individual modules and module groups. Also, the configurator automatically creates a detailed list of part numbers, planning data and standard configurations for you.

With just one click of the mouse, you can request a non-binding quotation for your customised u-remote configuration.
Realise your full potential with the help of our experts

u-remote is extremely easy to implement – both as part of completely new projects and during re-designs and system optimisations to existing machine concepts. But Weidmüller won’t leave you alone in this regard. Because we want to make your work on your projects as simple as possible. You benefit from our wide range of advisory and support services.

Our experienced application specialists will be more than happy to develop additional optimisation opportunities in complex system architectures together with you.

Put through its paces and incorporated in your system

Weidmüller provides you with active support in your projects

Ask for product samples and experience the benefits for yourself!

Experience the convincing concept of u-remote with your own eyes: ask for a personal product sample or a fully functional u-remote test station that you can use to put our system through its paces today.

You’ll be inspired by u-remote’s simple handling, its high system performance and its efficient and flexible potential uses. Let’s connect.

www.u-remote.net
Let’s connect.

As experienced experts we support our customers and partners around the world with products, solutions and services in the industrial environment of power, signal and data. We are at home in their industries and markets and know the technological challenges of tomorrow. We are therefore continuously developing innovative, sustainable and useful solutions for their individual needs. Together we set standards in Industrial Connectivity.

www.u-remote.net
Visit u-remote online and see for yourself the unbeatable benefits of the remote I/O system from Weidmüller. Includes a descriptive demonstration video, detailed product overview and information that you can download. Let’s connect.