Maximise the transparency and efficiency of your system automation
With our optimally coordinated IO-Link solutions
Let's connect.

Weidmüller

Increased system availability with the integration of intelligent sensors and actuators

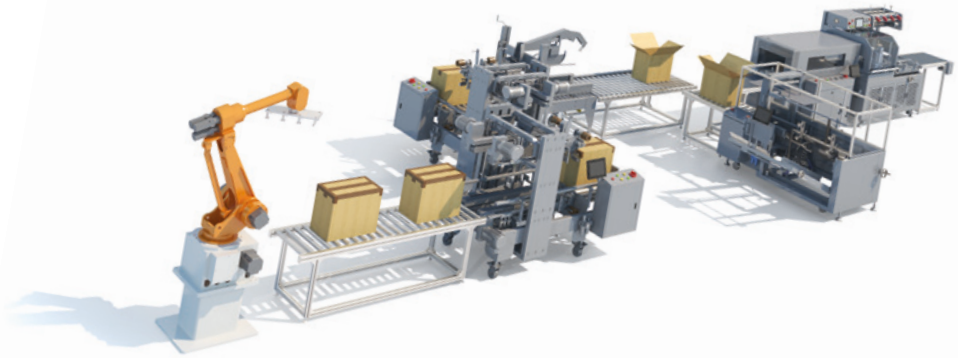
Simple and flexible with a high level of functionality thanks to IO-Link

Until now, the challenge of machinery and plant engineering has always been to significantly shorten the time-consuming assembly, commissioning and maintenance phases.
In these phases, individual components – sensors and actuators – are connected electrically, subsequently adjusted and parameterised or exchanged if necessary.

Using the IO-Link communication system to connect intelligent sensors and actuators to the controller significantly reduces the amount of time required. Sensors can be connected quickly and without any errors using a pre-assembled cable, for example, while automated and error-free commissioning is also made possible by the automatic downloading of parameter sets.

Another advantage is IO-Link's complete transparency right down to the sensor/actuator level, which substantially supports system availability. IO-Link allows for improved status analysis and precise error diagnostics, as well as simplified device replacement when needed. This leads to a significant reduction in downtimes and maintenance costs.

IO-Link is also the world's first standardised IO technology (IEC 61131-9) allowing for communication between sensors and actuators, making it one of the key technologies in the implementation of I4.0/IIoT concepts.



The particular benefits:

- Integrated complete solutions in the context of IO-Link
- Simple integration of power-supply and power-management components into the system automation
- New solutions such as voltage tracking or load cut-off thanks to remote control capability

IO-Link master modules
Protection class IP20 and IP67

Whether used as a control cabinet system, in mixed applications in the IP20 and IP67 degrees of protection or placed directly in the field for signal connection purposes, u-remote provides the user with all the freedoms of a flexible I/O architecture and offers the advantages of an integrated complete system. The IO-Link Configurator that is available for u-remote enables convenient parameterisation and configuration of the IO-Link devices, independently of the implemented fieldbus/network protocol.

IO-Link Master IP 20
In addition to four individually configurable IO-Link ports (type A), the IP 20 u-remote IO-Link module contains an additional digital input to process status signals from the connected IO-Link devices or from independent digital sensors.

IO-Link Master IP67
The IO-Link modules with IP67 protection can be installed directly on site in the field, thereby bringing the communication interface to the IO-Link devices directly into the system. The IO-Link Master modules with integrated Profinet gateway are 60 mm or 30 mm wide and each have eight IO-Link ports, four of which can be configured as type-B ports. The M12-L-coded supply connection allows up to 16 A to be fed into the system, thus supplying more modules than before.

Technical data

Type	Number of IO-Link ports	Port classification	Degree of protection	Inputs	Output current per module	Order no.	Qty.
UR20-4COM-IO-LINK	4	4 x type A	IP20	4 digital inputs	2 A	**1315740000**	1
UR67-PN-HP-8IOL-12-30M	8	4 x type A + 4 x type A/B (configurable)	IP67		9 A	**2426250000**	1
UR67-PN-HP-8IOL-12-60M	8	4 x type A + 4 x type A/B (configurable)	IP67		16 A	**2426260000**	1

The particular benefits:

IO-Link devices with increased performance

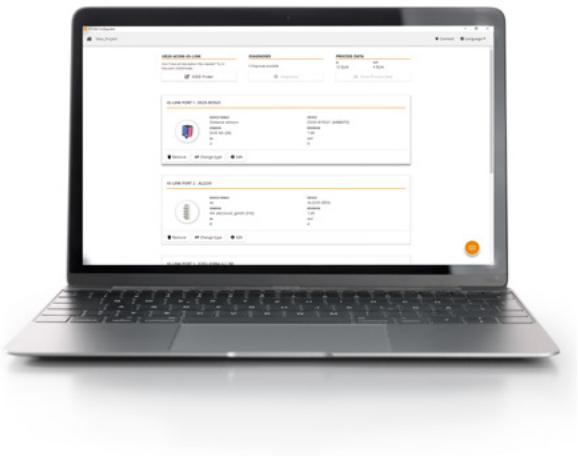
The wide range of additional functions offered by the new u-remote IO-Link Master ensures easier commissioning, more transparent processes and increased efficiency. These are all improvements that really pay off.

Powerful configuration software

The IO-Link Configurator from Weidmüller

The u-remote IO-Link Configurator can now be used to integrate IO-Link devices into the automation solution regardless of the fieldbus being used, and to carry out configuration and parameterisation. An intuitive, web-based user interface with integrated interface to IODD database makes it really simple to integrate IO-Link devices.

The online mode makes it possible to identify devices connected to the IO-Link Master, view their process status and diagnostic or error messages, and view and modify parameters while the devices are running.



A context menu makes IO-Link project management extremely easy. IO-Link projects can be saved and opened, and edited at a later point in time.

Configuration files can also be exported and then re-imported via the web application of the u-remote station.

You can also configure your IO-Link devices if no direct online connection is possible, e.g. because machines are being produced in series production or if configuration and setup of the systems are performed at different times or locations.

The particular benefits:

- Fieldbus-independent configuration and parameterisation of IO-Link devices
- Web-based, intuitive user interface with an integrated interface to IODDfinder
- Direct upload of configuration file to the IO-Link Master and IO-Link devices
- Options for the local storage, opening and editing of configuration files

Reliable, powerful, efficient and communication-enabled

PROtop: the future-proof high-end power supply

Communication-enabled components form the basis of networked production that can be used to exploit the potential of Industry 4.0. They can record product and status-based data, as well as internal machine measured values and energy parameters, and store them in a cloud. Based on the evaluated data, new services can be established for the optimisation and diagnosis of production processes or for energy management. All devices should therefore be networked as quickly as possible and connected to a cloud.

Communication-enabled with retrofit solution
PROtop can be retrofitted with a communication module for the requirements of tomorrow. This retrofit solution is simply connected to the PROtop power supply and allows for the transmission of process data to the higher-level controller. This networks the power supply to other components within the system. The solution is remote-controllable and is integrated into a system's condition monitoring system.

Process optimisation with condition monitoring
Condition monitoring allows for comprehensive process optimisation, such asreduced power consumption or the systematic planning of maintenance work. This considerably increases the functional reliability and efficiency of an extremely wide range of systems – in food and packaging systems with high hygiene requirements or in hard-to-access wind power installations in offshore wind parks.

Technical data

Type	Watt	Rated voltage	Peak load reserve [DCL]	Connection system	Temperature range	Order no.	Qty.
PRO TOP1	120 W	12V	40A / 15ms	PUSH-IN	-25 ... +70° C	**2466910000**	1
PRO COM IO-LINK						**2587360000**	1
Additional PROtop	**variants can be found in the online catalogue.**						

The particular benefits:

- Simple integration of process data into the higher-level controller for improved condition monitoring
- New solutions such as voltage tracking or load cut-off thanks to remote control capability
- Simpler commissioning thanks to automatic parameterisation via machine control and minimal maintenance work

Intelligent securing of DC loads

topGUARD load monitoring system with communication via IO-Link

Modern machines and plants require load monitoring systems that are capable of communication. The IO-Link-compatible load monitoring system topGUARD offers remote control options, full data transparency, and reliable protection of the 24 V system voltage.

topGUARD is the perfect addition to the IO-Link-compatible PROtop power supplies for innovative power-management systems. It follows the innovative approach of integrated potential distribution, which saves space and time during device installation. The IO-Link module simply needs to be connected and an IODD file integrated in order to carry out parameterisation and control and to provide the user with all operating data. The module can be used both for PROtop power supplies as well as for topGUARD load monitoring.

Technical data

Type	Description	Order no.	Qty.
TGD FIM-C	Power-feed module	**2625000000**	1
TGD ELM-6	Load monitoring	**2624980000**	1
PRO COM IO-LINK	Communication module	**2587360000**	1
Additional modules	**for topGUARD can be found in the online catalogue.**		

The particular benefits:

- Data transparency and remote control thanks to IO-Link
- Maximum flexibility thanks to modular complete system
- Voltage-adaptive load monitoring according to Class 2
- Time and cost savings thanks to integrated potential distribution
- Simple migration from maxGUARD to topGUARD

Flexible application automation

u-control 2000 for powerful and compact control

The powerful u-control 2000 control unit is based on the compact design of the u-remote fieldbus coupler for even more space savings and maximum flexibility in the implementation of individual automation solutions.
The control system is compatible with the entire u-remote range and allows I/O modules to be connected directly. It can be combined with our versatile u-create studio and u-create web engineering tools for a full range of applications.

The u-control 2000 control system includes an Ethernet-based fieldbus and a TCP/IP interface for programming. It also has an optional CAN interface. Real-time communication via the protocol Modbus TCP is also available as an option. u-control 2000 also has a Dual-Core ARM A9 processor and a USB service interface. In addition to the battery-buffered real-time clock, there is also a plug-in station for a microSD card with up to 32 GB.

When used in combination with the u-create software tools, the u-control 2000 control system allows a high level of individualisation. u-create web with Node RED, for example, allows for the direct transfer of data to the cloud.

Technical data

Type	Processor	Memory (flash)	Real-time clock	Max. number of I/O modules	Interface	Order no.	Qty.
UC20-SL2000-AC	Dual Core ARM Cortex A9, 624 MHz, 512 Mbyte RAM	32 GB via microSD	Battery buffered	64 ST	2x Ethernet TCP/IP, 1x micro USB	**1334980000**	1
UC20-WL2000-AC	Dual Core ARM Cortex A9, 624 MHz, 512 Mbyte RAM	32 GB via microSD	Battery buffered	64 ST	2x Ethernet TCP/IP, 1x micro USB	**1334950000**	1
UC20-WL2000-IOT	Dual Core ARM Cortex A9, 624 MHz, 512 Mbyte RAM	32 GB via microSD	Battery buffered	64 ST	2x Ethernet TCP/IP, 1x micro USB	**1334990000**	1

The particular benefits:

- Direct transfer of data to the cloud via u-create web with Node RED
- High level of security thanks to the Security-by-Design concept
- Compact and space-saving

Weidmüller – Your Partner in Industrial Connectivity

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.

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