BALLUFF

sensors worldwide

Easy RFID

Simple solutions for assembly and handling

RFID Ensures Transparency

Optimizing processes in harsh environments

Production and quality data automatically documented
Industrial RFID systems are the perfect solution for documenting individual working steps reliably and comprehensively during industrial manufacturing in harsh environments. During this ongoing process, these systems record all production and quality data directly at the object: in machine tools, in high-rack storage areas or on workpiece carriers. This process is carried out without being seen so that stray light and dirt deposits do not have any effect.

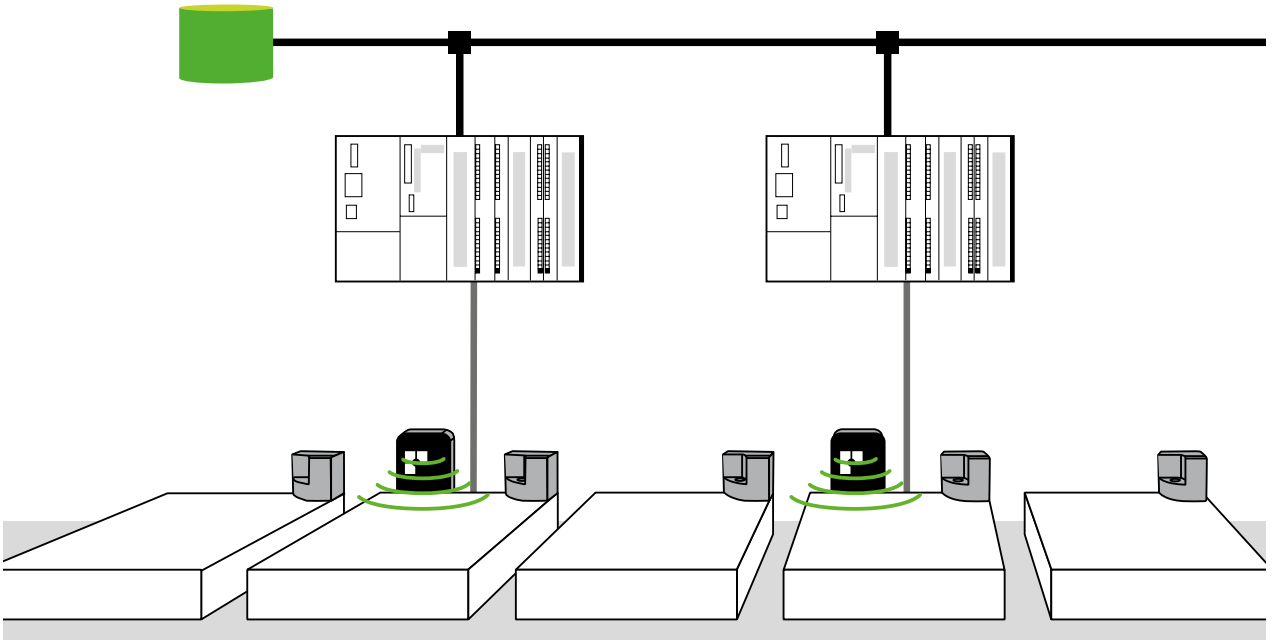
The self-controlling systems guarantee optimum, transparent processes and

- reduce costs through consistent fault prevention
- increase productivity
- support quality management

Integratable systems – network-independent and easy to use
Modular handling and assembly systems usually do not have much space for installing industrial RFID systems. Therefore, Balluff RFID offers extremely compact designs with perfectly matched components that are easy to combine. These are easy to use, network-independent and can be integrated easily into most common profile systems.

RFID read/write heads have been optimized specifically for compact transfer systems to simplify assembly. An additional holder is not necessary. Its compact metal housing in IP 67 is sturdy. The LEDs visible from any angle enable direct control right at the system.

Central data memory
All data is stored centrally. In this process, the ID of the data carrier (unique ID) must simply be read out. This ID is located right next to the controller. Its one-time assignment guarantees secure tracking.



Permanently installed read/write head with corner data carrier

Perfect Performance

Perfectly matched components

Balluff products cover the entire RFID range with a wide variety of different components that can be connected in a vast array of different combinations. Together with IO-Link, you can implement the most simple, cost-effective solutions.

IO-Link

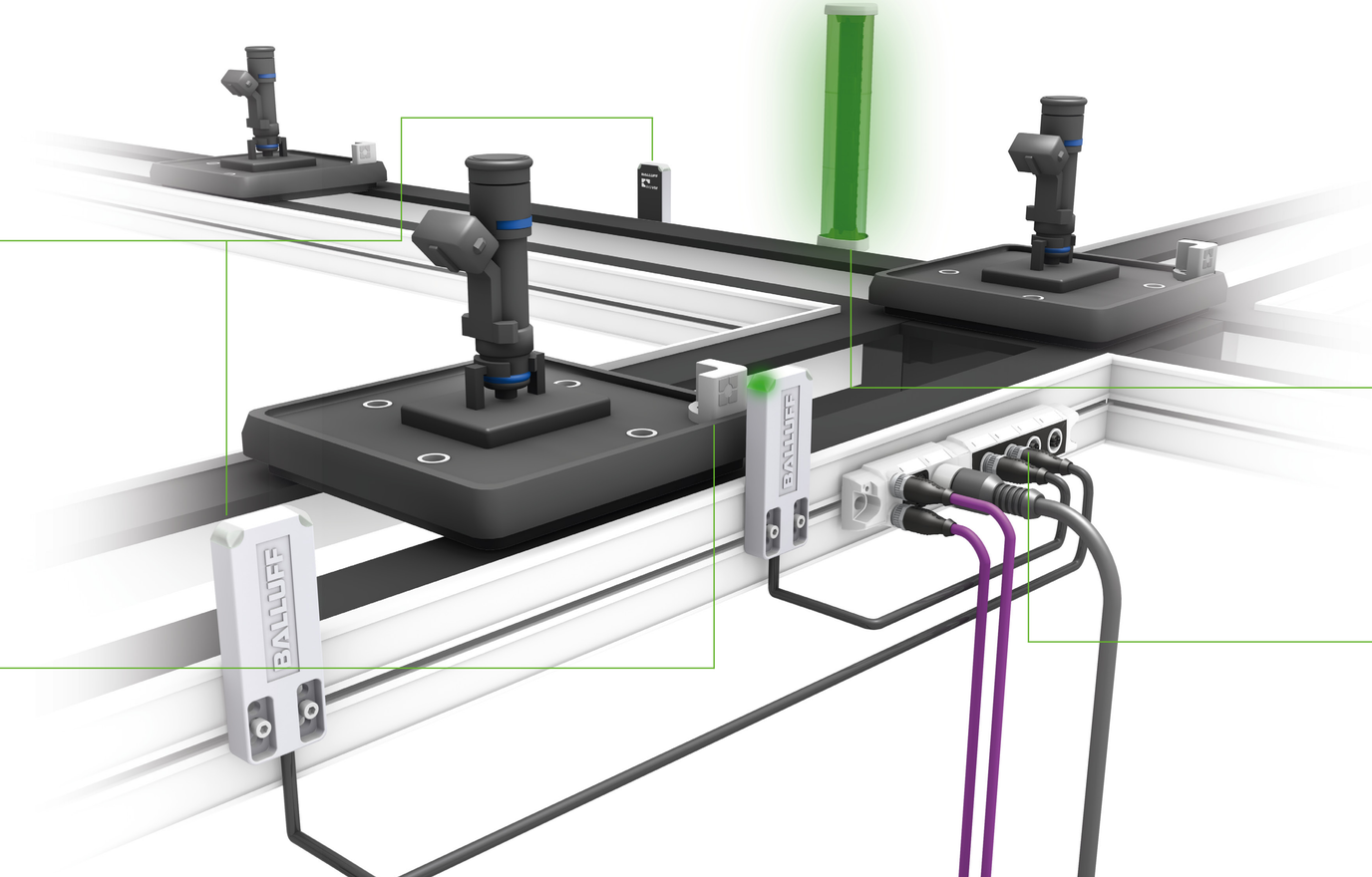
BIS M Read/write heads		
Dimension	105×40×15 mm	105×40×15 mm
Order code	BIS014J	BIS014K
Part number	BIS M-408-045-001-07-S4	BIS M-458-045-001-07-S4

BIS M Read/write heads			
Dimension	M30×1.5	80×84×40 mm	80×84×40 mm
Order code	BIS00LH	BIS00LK	BIS00LM
Part number	BIS M-400-045-001-07-S4	BIS M-401-045-001-07-S4	BIS M-451-045-001-07-S4

Read/write data carriers				
Dimension	Ø 12×6 mm	Ø 25×5 mm	Ø 8×35 mm	24×24×21 mm
Properties	Flush installation in metal possible	For high temperatures up to +220 °C	Corner data carrier	Corner data carrier
Order code	BIS0042	BIS00YE	BIS00P1	BIS00NZ
Part number	BIS M-105-02/A	BIS M-132-03/L-HT	BIS M-154-03/A	BIS M-191-02/A

Rod antenna

Circular antenna



More Efficiency, Lower Costs

IO-Link saves time and money in overall production

Simplification of installation
- Faster, simpler connection with an unshielded, three-core standard cable
- Standard sensors can also be integrated into the fieldbus level
- 16-way IO-Link master for 16 different IO-Link devices or 16 hubs
- Each with up to 16 binary sensors
- Cost-saving due to fewer mechanical installations
- High security against interference thanks to digital communication

SmartLight
The intelligent light for displaying machine states
For many testing and inspection procedures, visualizing operating states directly in the system means additional security.

The benefits to you
- Use less display equipment
- Flexibly illustrate operating states with 16 bits and RGB LEDs
- Plug-and-play

IO-Link master
BNI fieldbus modules are available for all important bus systems to simplify network topology.

The benefits to you
- Rugged metal housing
- Wire all sensors and actuators efficiently and cost-effectively
- Diagnostics-capable

Requirements-based maintenance
- Continuous diagnostics
- Automatic readjustment via the controller
- Predictive error detection
- Longer maintenance intervals

Efficient operation
- Positioning of the sensors on site
- Process monitoring, configuration and error analysis of the IO-Link devices via the controller
- Fast, high-performance data transmission
- Time-optimized machine processes
- High signal quality thanks to digital data transmission
- A selection of sensors that is highly suited to the particular application because of the simultaneous use of binary, analog and IO-Link sensors

Highest machine availability
- Faster, error-free sensor replacement and quick commissioning
- Automatic configuration of an IO-Link sensor
- Prompt format changes and recipe changes centrally via the controller
- Additional security from clearly identifiable IO-Link devices

IO-Link

Sensor hubs
Connection technology with minimal effort

The benefits to you
- Bundle signals: from up to 16 sensors/actuators per sensor hub
- Up to 272 inputs/outputs via a master module
- Reduce bus nodes

Easy RFID

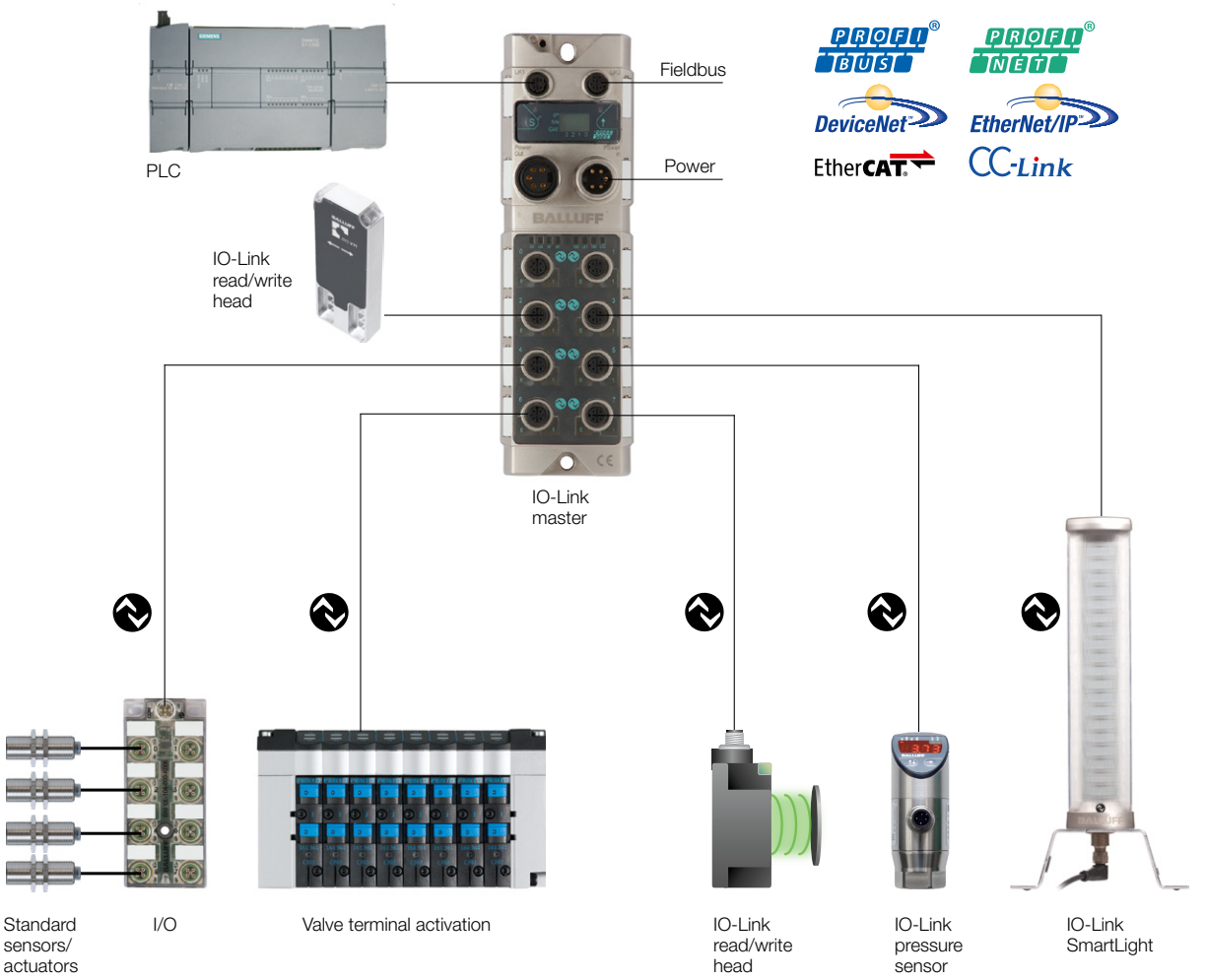
How IO-Link supports simple identification solutions

Simple and cost-effective integration solution
IO-Link is a simple, cost-effective option for implementing identification solutions. This is because an unshielded, three-core cable up to 20 m long is sufficient for connecting IO-Link RFID at the fieldbus level. Easy RFID is recommended primarily for applications with central data storage: for small volumes of data and instances where the read/write speeds do not play a central role.

Fast installation, central configuration, continuous diagnostics
Easy RFID functions as easily as a sensor. This is because RFID read/write heads with IO-Link interface can be installed quickly. They are simply connected to the IO-Link master and centrally configured. This reason for this is that the master handles the data transfer between the data carrier and the fieldbus. In the opposite direction, the IO-Link RFID returns continuous diagnostics via the master.

Bundling signals – reducing the number of devices
Up to 16 IO-Link read/write devices or other intelligent devices can be connected to a single node, depending on the fieldbus system. It is also possible to connect up to 272 sensors/actuators. Bundling the signals reduces the number of devices. This simple network topology saves time and money.

IO-Link



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Systems and Service

Industrial Networking and Connectivity

Industrial Identification

Object Detection

Linear Position Sensing and Measurement

Condition Monitoring and Fluid Sensors

Accessories

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