

BALLUFF

sensors worldwide

RFID-Reader BIS M-4008

The all-in-one solution with Profinet interface

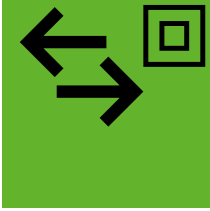


BALLUFF



BIS M
Identification System





All-in-One RFID Reader BIS M-4008 for Profinet

Connects directly – saving you time, space and money

HF-Reader BIS M-4008 –

communicate directly with the control level

The 13.56 MHz readers with IP67 protection are used for non-contact identification of data carriers on workpieces and workpiece carriers in the production process. These all-in-one RFID readers are connected to the control level directly via the Profinet interface. No additional processor is needed.

Simple system expansion

The integrated 2-port Ethernet switch allows both RT (Real Time) and IRT (Isochronous Real Time) to be used in line and ring topologies. System expansion is also possible with no effort. This is because no external switches are required. Device master data are provided in the form of a GSDML file for device-specific parameterization.

Read up to 10,000 bytes per second

BIS M-4008 readers support data carriers which conform to the RFID standard ISO 15693. The readers are also the right choice when large amounts of data need to be transmitted in the shortest possible time: In combination with Balluff High-Speed/High-Memory tags the BIS M-4008 readers can read and write several thousand bytes per second.

Data carriers directly on the workpiece increase production flexibility. All the parameters and production steps can be stored where the work takes place, unburdening the central control system. The data carriers are available in various memory capacities up to 128 kB.

Diagnostics using integrated webserver

The built-in webserver enables diagnostics. If connected to a computer, the latter communicates with the device and displays all the detailed information about the current status. No special software is required.



Dimension		119 × 80 × 35 mm	119 × 80 × 35 mm
Housing material		Cast zinc coated and PC	Cast zinc coated and PC
Profinet		BIS0179	BIS017A
Transmission frequency		13.56 MHz	13.56 MHz
Interface		Profinet IO: IRT-capable 2-port switch	Profinet IO: IRT-capable 2-port switch
Antenna type		Round	Rod
Weight		410 g	490 g
Degree of protection per IEC 60529		IP67 (with connectors)	IP67 (with connectors)
Connection configuration	Power	M12 male, 4-pin	M12 male, 4-pin
	Profinet In	M12 female, 4-pin, D-coded	M12 female, 4-pin, D-coded
	Profinet Out	M12 female, 4-pin, D-coded	M12 female, 4-pin, D-coded
Ambient temperature		0...+70 °C	0...+70 °C
Storage temperature		-20...+85 °C	-20...+85 °C
Supported standard		ISO 15693	ISO 15693

**Sophisticated fastening concept
for a variety of mounting possibilities**

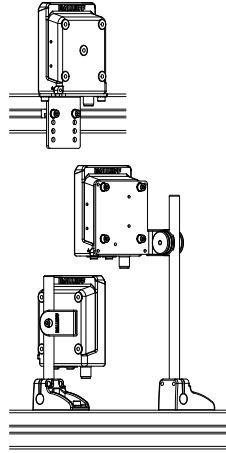
Both special mounting brackets and kit elements from the Balluff Mounting System are available for attaching:

Mounting bracket

Order code	Description
BAM02PN	Mounting bracket for direct attachment

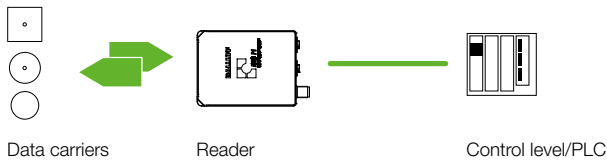
Mounting System BMS

Order code	Description
BAM01AY	Sensor and reflector holder
BAM024T	Sensor holder
BAM024P	Base holder
BAM021Y	Mounting rod Ø 12 mm, length 100 mm
BAM002R	Mounting rod Ø 12 mm, length 150 mm
BAM021T	Mounting rod Ø 12 mm, length 200 mm
BAM002T	Mounting rod Ø 12 mm, length 250 mm
BAM021W	Mounting rod Ø 12 mm, length 300 mm



Direct Profinet connection

- Reduced wiring effort
- Integrated 2-port Ethernet switch makes additional switches unnecessary
- Webserver for monitoring Reader status
- Simple S7 programming with ready-made function blocks



**4-conductor M12 standard cable
for power and Profinet connections**



Order code	Description
BCC032H	Power cable, 5 m
BCC032J	Power cable, 10 m
BCC04K8	Ethernet cable, straight M12 connector / straight RJ45 connector, 5 m, PUR shielded
BCC04K9	Ethernet cable, straight M12 connector / straight RJ45 connector, 10 m, PUR shielded
BCC04K2	Ethernet cable, straight M12 connector / straight M12 connector, 5 m, PUR shielded
BCC04K3	Ethernet cable, straight M12 connector / straight M12 connector, 10 m, PUR shielded

For additional cable lengths, visit www.balluff.com





LED indicators for diagnostics directly at the device

All-around visible status LEDs reduce startup and down time. These enable status verification at any time. Bright LEDs also indicate the bus status.

Mounting directly on metal

The rugged, compact housing with IP67 protection is perfect for field mounting in harsh industrial environments. Attachment on metal is possible with no clear zone, since the housing is constructed of die-cast zinc. A provided grounding strap ensures perfect electromagnetic compatibility.

The right data carrier for any application

Data carriers are available in many form factors and with a variety of characteristics (high-temperature, on-metal, ...).

Combinations include the following:

BIS0179 with round antenna

Order code	Installation	Range
BIS0043, BIS0111	—	0...52 mm
	—	0...32 mm
BIS011F	—	0...36 mm
	—	0...28 mm
BIS0046	—	0...80 mm
BIS00YE	—	0...60 mm
BIS00Y4	—	0...90 mm
BIS00Y9	—	0...55 mm
	—	0...45 mm
BIS00PU, BIS0119	—	0...38 mm
BIS011H, BIS00NW	—	0...18 mm

BIS017A with rod antenna

Order code	Installation	Range
BIS004F	—	0...60 mm
BIS004H	—	0...45 mm
BIS00P3	—	0...100 mm
BIS011W	—	0...55 mm
BIS0117	—	0...68 mm
BIS011M	—	0...42 mm
BIS0112	—	0...58 mm
BIS012J	—	0...42 mm
BIS00NZ	—	0...30 mm

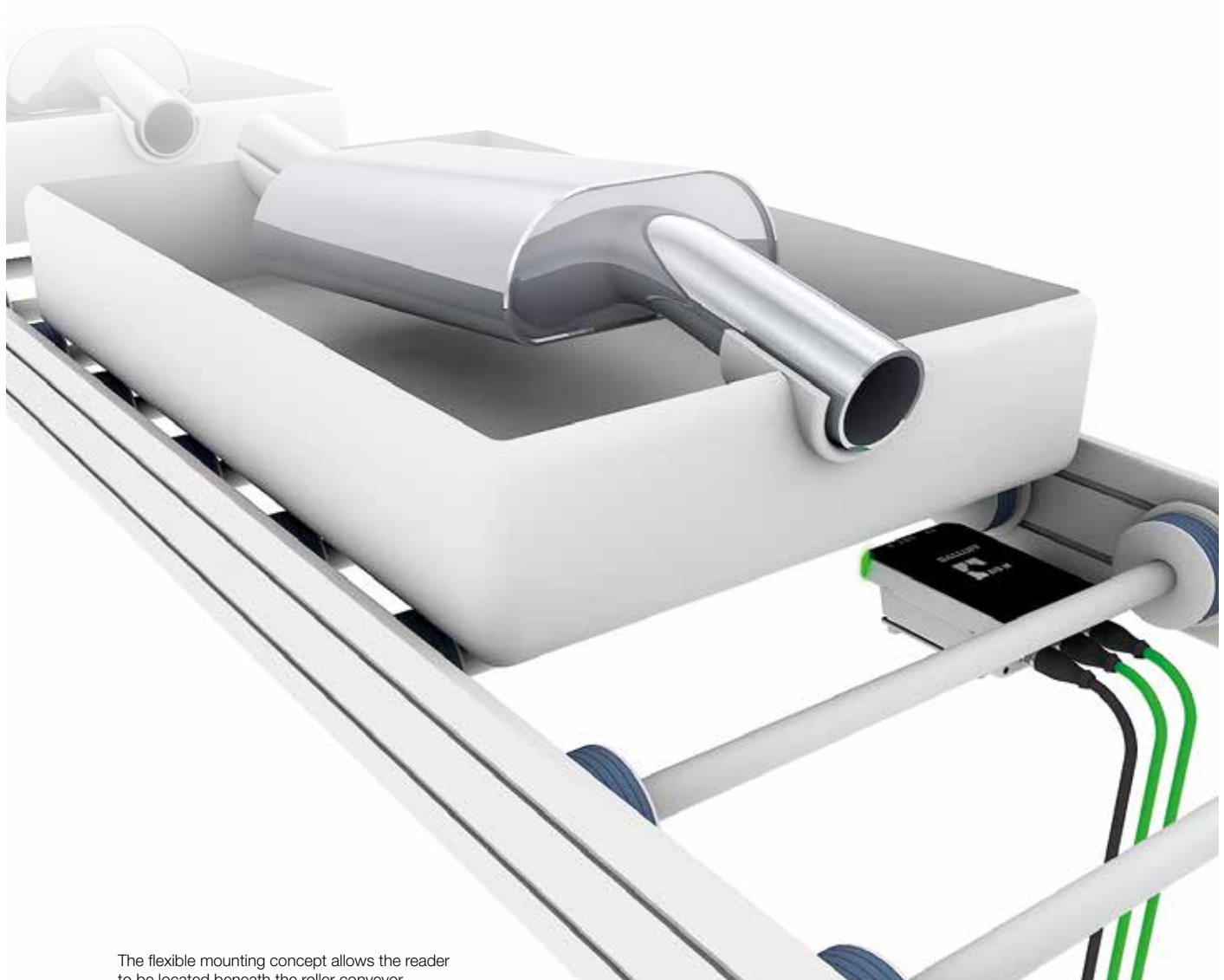
— Non-flush on steel — Non-metal

Traceability for Production

RFID ensures transparency and efficiency in the production process

The BIS M-4008 provides transparency and targeted error management in-process by making all data traceable. Typical weak points can be identified early and counter-measures taken. This provides production security, enables fast correction runs and prompt adjustments when requirements change. RFID systems record every process step – all the production parts used, all materials and process fluids including time, location and sequence.

This execution-, process- and origin information are automatically documented and are available in real time on the data carrier. These data are sent to the BIS M-4008 Reader and from there to the PLC.



The flexible mounting concept allows the reader to be located beneath the roller conveyor.

BALLUFF

sensors worldwide



Systems and Service



Industrial Networking and Connectivity



Industrial Identification



Object Detection



Linear Position Sensing and Measurement



Condition Monitoring and Fluid Sensors



Accessories

Headquarters

Balluff GmbH
Schurwaldstrasse 9
73765 Neuhausen a.d.F.
Germany
Phone +49 7158 173-0
Fax +49 7158 5010
balluff@balluff.de



www.balluff.com