



Identification systems

Large selection of RFID antennas with IO-Link



RFID 13.56 MHz



Nine unit versions for different applications

Flexible parameter setting, diagnostics and data handling thanks to IO-Link

Perfect for identification tasks with small data volumes

Easy visualisation of the antenna parameters with LR DEVICE or IO-Link master via the IODD



Applications

Thanks to the easy integration via IO-Link the new RFID antennas are suitable for a wide range of applications.

They are perfect for use for the identification of workpiece carriers in conveyor technology, as only a small amount of data needs to be transmitted.

In machine tools, magazines and moulded parts can be detected via RFID and IO-Link. This reduces cycle times and increases the production quantity.

In automotive production, body components or engines are compared to order numbers via RFID in order to control processing steps or check the final assembly.



Advantages of the RFID solutions from ifm:

ifm offers the largest product range of IO-Link sensors on the market. The new RFID antennas now complete the range.

The RFID antennas are designed for the connection to IO-Link masters. These masters offer up to eight M12 sockets for the connection of IO-Link RFID antennas.

Depending on the version, the IO-Link masters have an EtherCAT, Profibus, Ethernet TCP/IP, EtherNet/IP or PROFINET interface for communication to the PLC.

The robust design of the antennas with protection rating IP 67 and IP 69K permits use in harsh industrial environments.

All RFID tags to HF standard ISO 15693 can be used.

Data width

The process data width in the process image is 32 bytes. The user data width in the process image is 28 bytes each in the input and output.





IO-Link functions

- Upload/download of parameters for device replacement
- Reading of transponder UIDs
- Reading and writing of transponder user data

IO-Link additional functions:

- Indication of the tag presence bit
- Antenna on/off
- Data hold time adjustable

IO-Link masters

Design	Description	Order no.
StandardLine Coolant		
	Profinet 4-port	AL1100
	EtherNet/IP 4-port	AL1120
	Profinet 8-port	AL1102
	EtherNet/IP 8-port	AL1122
DataLine Coolant		
	Profinet 4-port	AL1300
	EtherNet/IP 4-port	AL1320
	EtherCat 4-port	AL1330
	Modbus TCP 4-port	AL1340
	Profinet 8-port	AL1302
	EtherNet/IP 8-port	AL1322
	EtherCat 8-port	AL1332
	Modbus TCP 8-port	AL1342

Products

Design	Description	Order no.
IO-Link RFID antennas		
	RFID antenna 13.56 MHz, M12 design, flush	DTI410
	RFID antenna 13.56 MHz, M12 design, non flush	DTI411
	RFID antenna 13.56 MHz, M18 design, flush	DTI420
	RFID antenna 13.56 MHz, M18 design, non flush	DTI421
	RFID antenna 13.56 MHz, M30 design, flush	DTI430
	RFID antenna 13.56 MHz, M30 design, non flush	DTI431
	RFID antenna 13.56 MHz, rectangular design 40 x 40 mm	DTI513
	RFID antenna 13.56 MHz, rectangular design 20 x 7 x 48 mm 1 m cable, M12 plug	DTI515
	RFID antenna 13.56 MHz, rectangular design 20 x 7 x 48 mm 2 m cable, M12 plug	DTI516
Antenna adapter		
	Adapter to increase the ranges for RFID antenna type M18	E80390
	Adapter to increase the ranges for RFID antenna type KQ	E80391
	Antenna adapter for a wider sensing field for RFID antenna type KQ	E80392
Selection RFID transponders		
	ID tag/51x51/06 – 13.56 MHz, 10 pcs	E80400
	Bracket for ID tag E80400	E80401
	ID tag/M5x16.5/06 – 13.56 MHz, 10 pcs	E80347
	Tag fixture for workpiece carriers with ID tag E80345, 13.56 MHz, 896 bits	E80348
	ID tag/34X6.0/06 – 13.56 MHz, 1024 bits, 10 pcs	E80342
	ID tag/90X34x7/06 – 13.56 MHz, 896 bits, 5 pcs	E80343
	ID tag/16X3/06 – 13.56 MHz, 896 bits, 10 pcs	E80344