# RFID read/write device

IQT1-F61-IO-V1

- Operating frequency 13.56 MHz
- IO-Link interface
- Conforms to ISO 15693
- Suitable for FRAM transponder
- LEDs as function indicators
- Particularly flat construction
- Connection cable with V1 plug (M12 x 1)
- Degree of protection IP67
- Can be mounted on metal
- For connection to IO-Link master

HF RFID read/write device with IO-Link in accordance with ISO 15693

Dimensions
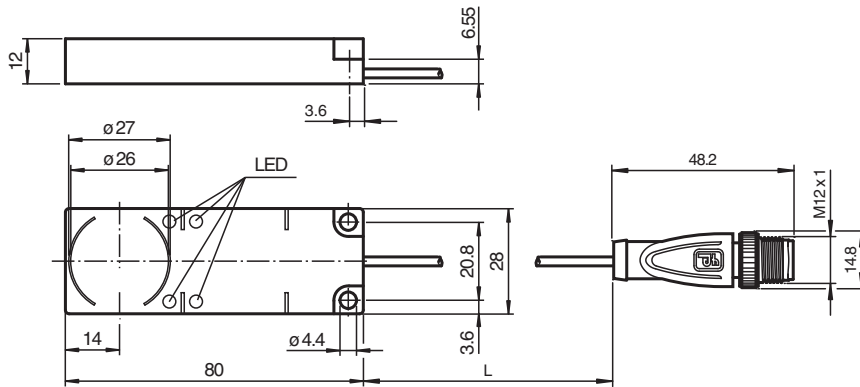
Technical Data

General specifications

Operating frequency	13.56 MHz
Transfer rate	26 kBit/s
Sensing range	
Read distance	0 ... 55 mm
Write distance	0 ... 55 mm
Width	max. 45 mm
UL File Number	E87056
MTBF	140 a (Operation at +40 °C)

Indicators/operating means

LED green	Illuminated: power on Flashing: IO-Link communication
LED yellow	Data carrier detected
LED red	Flashing: IO-Link communication interrupted
LED blue	Write/read attempt is being performed

Electrical specifications

Rated operating voltage	U_e	20 ... 30 V DC , ripple 10 %$_{SS}$

Technical Data

No-load supply current	I_0	≤ 70 mA (at 24 V DC)
Power consumption	P_0	≤ 2 W
Interface		
Interface type		IO-Link
IO-Link revision		1.1
Process data		Input 32 Byte Output 32 Byte
Vendor ID		1 (0x0001)
Device ID		4194561 (0x400101)
Data transfer rate		COM3 (230.4 kbits/s)
Min. cycle time		4 ms
SIO mode support		no
Compatible master port type		Class A Class B
Directive conformity		
Radio equipment		
Directive 2014/53/EU		EN 301489-1 EN 301489-3 EN 300330 EN 62368-1 EN 50364
RoHS		
Directive 2011/65/EU (RoHS)		IEC/EN 63000
Standard conformity		
Degree of protection		EN 60529
Communication interface		IEC 61131-9 / IO-Link V1.1.2
RFID		ISO/IEC 15693-2 ISO/IEC 15693-3 ISO/IEC 18000-3
Approvals and certificates		
UL approval		cULus Listed, Class 2 Power Source, Type 1 enclosure
FCC approval		This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation. **Caution:** Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
IC approval		This device complies with Industry Canada licence-exempt RSS standard(s) and with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device. Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.
MIC approval		AC-21097
Radio approval		USA: FCC IREIQT1F61IO Canada: IC 7037A-IQT1F61IO
Ambient conditions		
Ambient temperature		-25 ... 70 °C (-13 ... 158 °F)
Storage temperature		-40 ... 85 °C (-40 ... 185 °F)
Mechanical specifications		
Housing length		80 mm
Housing width		28 mm
Housing height		12 mm
Degree of protection		IP67
Connection		connector M12 x 1
Material		

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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Technical Data

Housing	PBT
Encapsulation compound	WEVO 403FL/300
Installation	
Distance between two heads	≥ 150 mm
Mass	approx. 60 g
Cable length	20 cm

Connection

1	L+
2	n.c.
3	L-
4	C/Q
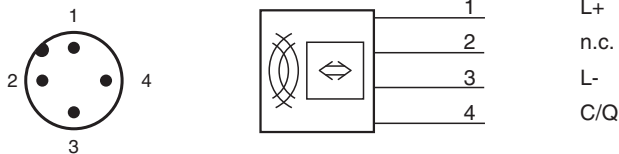
Safety Information

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Matching System Components

	ICA-IIOT-KIT2K-IO	IIoT Starter Kit with IP20 EtherNet/IP Master
	ICA-IIOT-KIT3K-IO	IIoT Starter Kit with IP20 PROFINET Master
	ICA-IIOT-KIT2G-IO	IIoT Starter Kit with IP67 EtherNet/IP Master
	ICA-IIOT-KIT3G-IO	IIoT Starter Kit with IP67 PROFINET Master

Accessories

	ICE1-8IOL-S2-G60L-V1D	Ethernet IO-Link master with PROFINET S2 redundancy
	IQC21-8 10pcs	Data carrier
	IQC21-10 10pcs	Data carrier
	IQC21-12.4 10pcs	Data carrier
	IQC21-16 50pcs	Data carrier

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Accessories

	IQC21-30 25pcs	Data carrier
	IQC21-50F-T10	Data carrier
	IQC21-58	Data carrier
	IQC22-22-T9 50pcs	Data carrier
	IQC33-20 50pcs	Data carrier
	IQC33-30 25pcs	Data carrier
	IQC33-50 25pcs	Data carrier
	V1-G-0,3M-PVC-V1-G	Cordset M12 socket straight to M12 plug straight A-coded, 4-pin, PVC cable grey
	V1-G-5M-PVC-V1-G	Cordset M12 socket straight to M12 plug straight A-coded, 4-pin, PVC cable grey
	V1-G-10M-PVC-V1-G	Cordset M12 socket straight to M12 plug straight A-coded, 4-pin, PVC cable grey
	ICE2-8IOL-G65L-V1D	EtherNet/IP IO-Link master with 8 inputs/outputs
	ICE3-8IOL-G65L-V1D	PROFINET IO IO-Link master with 8 inputs/outputs
	ICE2-8IOL-K45S-RJ45	EtherNet/IP IO-Link master with 8 inputs/outputs, DIN rail, screw terminal
	ICE3-8IOL-K45P-RJ45	PROFINET IO IO-Link master with 8 inputs/outputs, DIN rail, push-in terminals
	ICE3-8IOL-K45S-RJ45	PROFINET IO IO-Link master with 8 inputs/outputs, DIN rail, screw terminal
	IO-Link-Master02-USB	IO-Link master, supply via USB port or separate power supply, LED indicators, M12 plug for sensor connection
	ICE1-8IOL-G30L-V1D	Ethernet IO-Link module with 8 inputs/outputs
	ICE1-8IOL-G60L-V1D	Ethernet IO-Link module with 8 inputs/outputs
	ICE2-8IOL-K45P-RJ45	EtherNet/IP IO-Link master with 8 inputs/outputs, DIN rail, push-in connectors

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