

Identification Systems

Versatile Technologies for Impressive Transparency

Identification systems guarantee reliable, transparent processes and offer the user a decisive competitive advantage. Depending on your requirements, you can opt for camera-based or wireless systems from Pepperl+Fuchs and benefit from the specific advantages of both technologies. Our experts will help you to find the perfect identification solution for every situation.

RFID—Flexible System Solution for End-To-End Process Transparency

If your application demands the highest level of flexibility, RFID (radio frequency identification) is the clear choice. Wireless technology makes it possible not only to read object information, but to adapt this information as required. Furthermore, there is no need for visual contact between the reader and tag.

With Pepperl+Fuchs, you receive a system solution that includes perfectly coordinated components across all frequency ranges. Decades of application expertise combined with an extensive portfolio of control interfaces, read/write heads, and tags in the standard LF, HF, and UHF frequency ranges enable us to guarantee the perfect solution for every identification task.

Optical Identification—Cost-Effective Solution for Track-and-Trace Applications

Optical identification systems are the perfect solution for applications that focus on cost-effectiveness. DPM (direct part marking) codes that are printed and directly marked are a highly economical solution.

The optical identification systems from Pepperl+Fuchs guarantee an impressive reading performance and operate at a high level of reliability, even under difficult conditions. Whether they are used for stationary reading or high-speed reading, mobile identification, or in applications with extreme conditions such as high temperature, these powerful devices always provide optimal transparency.



More information is available at
www.pepperl-fuchs.com/fa-ident

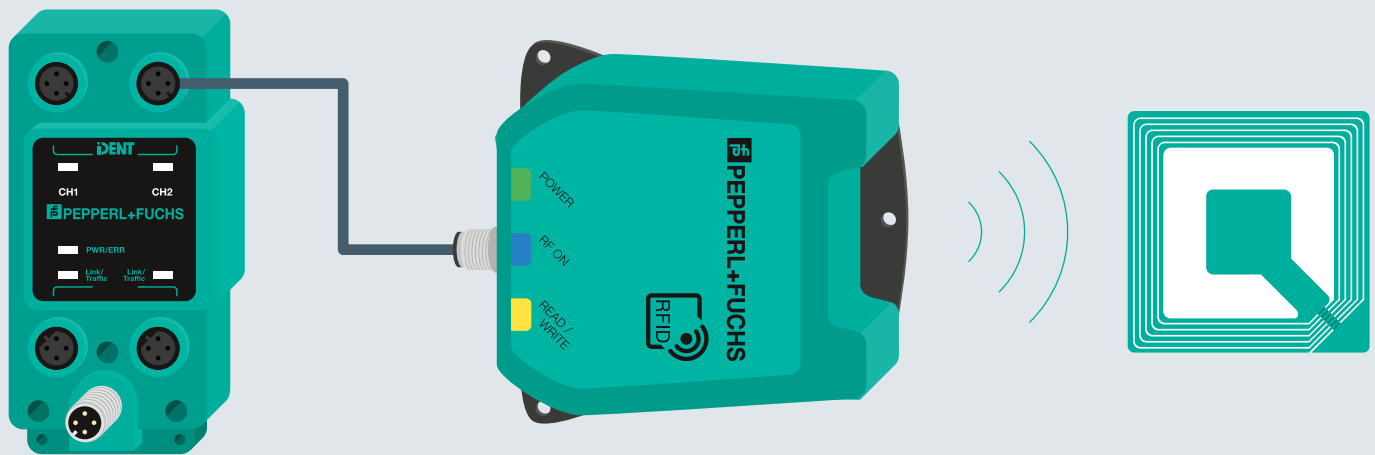




Identification Systems—Control Interfaces

IDENTControl: One System for Outstanding Compatibility

The control interfaces in the IDENTControl system are perfect for integrating into almost any system environment. Integration is simple and incredibly flexible. Furthermore, the control interfaces can be combined with a variety of read/write heads and tags, and are therefore ideal for global use. In addition, the system's wide-ranging compatibility grants the user complete freedom when expanding their own system.



Multiple read/write heads of varying frequencies from the Pepperl+Fuchs IDENTControl product family can be connected to the IDENTControl and IDENTControl Compact control interfaces. Connecting the devices is simple and hassle-free, ensuring the highest level of compatibility.

When a read/write head receives the data stored in a tag via its electromagnetic field, this data is automatically forwarded to the control interface and processed.

RFID Identification Systems

Contents



IDENTControl control interfaces
Page 302



Frequency range LF
Page 303



Frequency range HF
Page 304



Frequency range UHF
Page 305



Tags – frequency range LF
Page 306



Tags – frequency range HF
Page 307



Tags – frequency range UHF
Page 308



Handhelds – series HH27
Page 309

IDENTControl Control Interfaces



Standard Technical Data

Ambient temperature (min)	-25 °C
Ambient temperature (max)	70 °C

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

Model number	Number of read/write heads	Interface	Connection type	Degree of protection	Length L	Width W	Height H	UL
IC-KP-B17-AIDA1	Max. 4	EtherNet/IP, MODBUS/TCP, PROFINET, TCP/IP	AIDA	IP67	148	105	73	■
IC-KP-B6-2V15B	Max. 4	PROFIBUS	M12 connector plug	IP67	148	105	73	■
IC-KP-B6-SUBD	Max. 4	PROFIBUS	M12 connector plug, sub-D 9-pin	IP40	148	105	73	■
IC-KP-B6-V15B	Max. 4	PROFIBUS	M12 connector plug	IP67	148	105	73	■
IC-KP-B7-V95	Max. 4	DeviceNet	M12 connector plug, mini style	IP67	148	105	73	■
IC-KP-R2-V1	Max. 4	RS-232	M12 connector plug	IP67	148	105	73	■
IC-KP2-1HB17-2V1D	Max. 1	EtherNet/IP, MODBUS/TCP, PROFINET, TCP/IP	M12 connector plug	IP67	137	62	42	■
IC-KP2-1HB6-2V15B	Max. 1	PROFIBUS	M12 connector plug	IP67	137	62	42	■
IC-KP2-1HB6-V15B	Max. 1	PROFIBUS	M12 connector plug	IP67	137	62	42	■
IC-KP2-1HRX-2V1	Max. 1	RS-232, RS-485	M12 connector plug	IP67	137	62	42	■
IC-KP2-2HB17-2V1D	Max. 2	EtherNet/IP, MODBUS/TCP, PROFINET, TCP/IP	M12 connector plug	IP67	137	62	42	■
IC-KP2-2HB18-2V1	Max. 2	CC-Link	M12 connector plug	IP67	142	62	42	■
IC-KP2-2HB21-2V1D	Max. 2	EtherCAT	M12 connector plug	IP67	142	62	42	■
IC-KP2-2HB6-V15B	Max. 2	PROFIBUS	M12 connector plug	IP67	137	62	42	■
IC-KP2-2HRX-2V1	Max. 2	RS-232, RS-485	M12 connector plug	IP67	137	62	42	■

Highlights

- Connection/evaluation of all RFID frequencies on a single device
- EMC protection and sturdy, fully encapsulated metal housing for total noise immunity
- Simple system integration—can be connected to all standard fieldbuses
- Compact version for decentralized field mounting
- Display and function keys for easy commissioning
- Plug-in connections for simple handling

Brief Description

The control interfaces in the IDENTControl series allow up to four read/write heads of varying RFID frequencies to be connected at the same time. In addition, it is possible to operate the separate devices jointly and connect trigger sensors. The devices are available for all standard fieldbus types and Ethernet protocols (PROFIBUS, PROFINET, EtherNet/IP, TCP/IP, MODBUS TCP), and can therefore be used around the world.

Accessories

CBL-PUR-PN-GN-04x034-100M	Cable, PROFINET, PUR/PE, 4-wire, shielded
ICZ-2T/TR-0,2M-PUR ABG-V15B-G	Terminal cable for PROFIBUS with terminator
ICZ-3T-0,3M-PUR ABG-V15B-G	Y-splitter cordset for PROFIBUS
ICZ-3T-0,3M-PVC-CCL-V1-G	Y-splitter cordset for CC-Link
ICZ-AIDA1-B	Stopping plug for IC-KP-B17-AIDA1
ICZ-AIDA1-V45	Connector for RJ-45
ICZ-AIDA2-V45	Connector for RJ-45
ICZ-AIDA2-V45-0,2M-PUR-V1D-G	Cordset, RJ-45 to M12

Read/Write Heads—Frequency Range LF



Standard Technical Data

Frequency	LF (125 kHz)
Ambient temperature (min)	-25 °C
UL	■

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

Model number	Max. read distance	Connection type	Degree of protection	Ambient temperature (max)	Length L	Width W	Height H	Diameter D	CSA	EAC	UL
IPH-18GM-V1	50	M12 connector plug	IP67	70	66			18	■		■
IPH-30GM-V1	65	M12 connector plug	IP67	70	66			30	■		■
IPH-F15-V1	155	M12 connector plug	IP67	70	190	140	40.5		■		■
IPH-F61-V1	45	M12 connector plug	IP67	70	80	28	12		■		■
IPH-F90A-V1	90	M12 connector plug	IP67	55	144.5	43.5	21				■
IPH-F97-V1	70	M12 connector plug	IP67	55	540	50	34				■
IPH-FP-V1	100	M12 connector plug	IP67	70	113	80	40		■		■
IPH-FP7V4A	100	Terminals	IP69K	70	103	80	40				■
IPH-L2-V1	75	M12 connector plug	IP67	70	55.5	40	40		■	■	■

Highlights

- Wide variety of housing designs (cubic/cylindrical) for optimal integration
- Smaller designs with minimal space requirements
- Extra-compact versions for flush mounting on metal
- Special designs, optimized for integration into roller conveyor systems
- For demanding applications (e.g., in the food industry)

Brief Description

For applications with an operating distance of 0 millimeters to 100 millimeters, read/write heads in the low frequency range (125 kHz) are the perfect solution. Pepperl+Fuchs offers a complete portfolio of devices for such applications. These devices boast an impressively high level of reliability, even when used in metallic environments. The wide variety of cylindrical or cubic designs are available in various sizes and housing designs and are guaranteed to bring the highest degree of flexibility to any application. In addition, Pepperl+Fuchs offers a number of special designs that have been optimized to meet requirements specific to each industry. The portfolio includes solutions such as the LF systems in cylindrical designs with an M18/30 thread, specially designed to be flush mounted on metal.

Accessories

IC-KP-B17-AIDA1	IDENTControl control interface with Ethernet interface for TCP/IP, PROFINET, Ethernet/IP, and MODBUS TCP protocols
IC-KP-B6-V15B	IDENTControl control interface with PROFIBUS-DP interface
IC-KP2-2HB17-2V1D	IDENTControl Compact control interface with Ethernet interface for TCP/IP, PROFINET, Ethernet/IP, and MODBUS TCP protocols
IC-KP2-2HB21-2V1D	IDENTControl Compact control interface with EtherCAT interface
IC-KP2-2HB6-V15B	IDENTControl Compact control interface with interface for PROFIBUS DP
IC-KP2-2HRX-2V1	IDENTControl Compact control interface with RS-232 and RS-485 serial interface
IPC02-12 50pcs	Read-only tag

Read/Write Heads—Frequency Range HF



Standard Technical Data

Frequency	HF (13.56 MHz)
HF protocol	ISO 15693
Ambient temperature (min)	-25 °C
Ambient temperature (max)	70 °C

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

Model number	Max. read distance	Interface	Connection type	Degree of protection	Length L	Width W	Height H	Diameter D	CSA	KCC	UL
IQH1-18GM-V1	50		M12 connector plug	IP67	61			18	■	■	■
IQH1-F61-V1	55		M12 connector plug	IP67	80	28	12		■		■
IQH1-FP-V1	130		M12 connector plug	IP67	108.5	80	40		■		■
IQH1-FP7V4A	130		Terminals	IP69K	108.5	80	40				■
IQH1-F198-V1	150		M12 connector plug	IP67	190.5	175	12		■		■
IQH1-F198-M-V1	150		M12 connector plug	IP67	190.5	175	12				
IQT1-18GM-IO-V1	50	IO-Link	M12 connector plug	IP67	61			18	■		■
IQT1-F61-IO-V1	55	IO-Link	M12 connector plug	IP67	80	28	12		■		■
IQT1-FP-IO-V1	130	IO-Link	M12 connector plug	IP67	108.5	80	40		■		■
IQT1-18GM-R4-V1	50		M12 connector plug	IP67	61			18			■
IQT1-F61-R4-V1	55		M12 connector plug	IP67	80	28	12		■		■
IQT1-FP-R4-V1	130		M12 connector plug	IP67	108.5	80	40				■

Highlights

- IO-Link for Industry 4.0 applications
- Wide variety of housing designs (cubic and cylindrical) for optimal integration
- Smaller designs with minimal space requirements
- Extra-compact versions for flush mounting on metal
- Special designs, optimized for the tire manufacturing industry
- Supports the global standard ISO 15693

Brief Description

High-speed applications in which large amounts of data are being transferred call for read/write heads in the high-frequency range (13.56 MHz). These read/write heads offer fully reliable read results in all near-field applications up to 15 centimeters, making them the ideal solution for identifying pallets or trays in material handling, for instance. The Pepperl+Fuchs portfolio offers a wide variety of cylindrical and cubic designs for this purpose, available in various sizes and designs of housing. In addition, the portfolio includes versions designed for specific applications, such as the F198 with its ring-shaped design, which is perfectly tailored to the requirements of the tire industry. Another feature of this latest generation of HF RFID read/write heads is an IO-Link interface for connecting to all standard IO-Link masters.

Accessories

AB-FP	Mounting bracket
IC-KP-B17-AIDA1	IDENTControl control interface with Ethernet
IC-KP-B6-V15B	IDENTControl control interface with PROFIBUS
IC-KP2-1HB17-2V1D	IDENTControl Compact control interface with Ethernet
IC-KP2-1HB6-V15B	IDENTControl Compact control interface with PROFIBUS
IC-KP2-1HRX-2V1	IDENTControl Compact control interface with serial
IC-KP2-2HB17-2V1D	IDENTControl Compact control interface with Ethernet
IC-KP2-2HB21-2V1D	IDENTControl Compact control interface with EtherCAT

Read/Write Heads—Frequency Range UHF



Standard Technical Data

Frequency	UHF (865 MHz ... 928 MHz)
Connection type	M12 connector plug
Degree of protection	IP67
Ambient temperature (max)	70 °C

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

Model number	RF approval	Transmission power	Region UHF	Max. read distance	Ambient temp. (min)	Length L	Width W	Height H	CSA	UL
IUH-F190-V1-FR1-01	EU, Turkey	3 mW ... 1000 mW	ETSI (865 MHz ... 868 MHz)	2000	-20	100	100	63		
IUH-F190-V1-FR2-02	Argentina, Canada, USA	3 mW ... 1250 mW	FCC (902 MHz ... 928 MHz)	2000	-20	100	100	63	■	■
IUH-F190-V1-FR2-03	China	3 mW ... 800 mW	FCC (902 MHz ... 928 MHz)	2000	-20	100	100	63		■
IUH-F190-V1-FR1-04	India	3 mW ... 800 mW		2000	-20	100	100	63		
IUH-F190-V1-FR1-05	Singapore, Vietnam	3 mW ... 500 mW	ETSI (865 MHz ... 868 MHz)	2000	-20	100	100	63		
IUH-F190-V1-FR1-06	Russia	3 mW ... 800 mW		2000	-20	100	100	63		
IUH-F190-V1-FR2-07	Brazil	3 mW ... 1250 mW	FCC (902 MHz ... 928 MHz)	2000	-20	100	100	63		
IUH-F190-V1-FR2-08	Japan	3 mW ... 125 mW	FCC (902 MHz ... 928 MHz)	700	-20	100	100	63		
IUH-F190-V1-FR2-10	Australia		FCC (902 MHz ... 928 MHz)	2000	-20	100	100	63		
IUH-F190-V1-FR2-12	Hong Kong, Thailand	3 mW ... 1250 mW	FCC (902 MHz ... 928 MHz)	2000	-20	100	100	63		
IUH-F190-V1-FR2-13	Malaysia	3 mW ... 800 mW	FCC (902 MHz ... 928 MHz)	2000	-20	100	100	63		
IUH-F190-V1-FR2-14	Singapore, Vietnam	3 mW ... 500 mW	FCC (902 MHz ... 928 MHz)	2000	-20	100	100	63		
IUH-F192-V1-FR1	EU, India, Russia, Turkey	10 mW ... 2000 mW	ETSI (865 MHz ... 868 MHz)	4000	-25	268	270	81		
IUH-F192-V1-FR2	Australia, Brazil, China, Malaysia, New Zealand	10 mW ... 4000 mW	FCC (902 MHz ... 928 MHz)	4000	-25	268	270	81	■	
IUH-F192-V1-FR2-02	Argentina, USA	10 mW ... 4000 mW	FCC (902 MHz ... 928 MHz)	4000	-25	268	270	81	■	
IUT-F190-R4-V1-FR1-01	EU, Turkey	3 mW ... 1000 mW	ETSI (865 MHz ... 868 MHz)	2000	-20	100	100	63		
IUT-F190-R4-V1-FR2-02	Canada, USA	3 mW ... 1250 mW	FCC (902 MHz ... 928 MHz)	2000	-20	100	100	63	■	■
IUT-F190-R4-V1-FR2-03	China	3 mW ... 800 mW	FCC (902 MHz ... 928 MHz)	2000	-20	100	100	63		■
IUT-F190-R4-V1-FR1-05	Singapore, Vietnam	3 mW ... 500 mW	ETSI (865 MHz ... 868 MHz)	2000	-20	100	100	63		
IUT-F190-R4-V1-FR1-06	Russia	3 mW ... 800 mW		2000	-20	100	100	63		
IUT-F190-R4-V1-FR2-07	Brazil	3 mW ... 1250 mW	FCC (902 MHz ... 928 MHz)	2000	-20	100	100	63		
IUT-F190-R4-V1-FR2-14	Singapore, Vietnam	3 mW ... 500 mW	FCC (902 MHz ... 928 MHz)	2000	-20	100	100	63		

Highlights

- For medium to large detection ranges and global use
- Preassembled function blocks for quick and simple system integration
- Compact, durable housing with a wide range of applications
- Switchable antenna polarization for accurate tag identification and reliable process flows
- Multi tag reading for impressive productivity

Brief Description

The UHF systems (865 MHz – 928 MHz) from Pepperl+Fuchs are the perfect choice for all long-distance applications requiring long detection ranges of up to 6 meters. Their compact design featuring an integrated antenna means these devices are also ideal for use in confined spaces.

Accessories

IC-KP-B17-AIDA1	IDENTControl control interface with Ethernet
IC-KP2-1HB17-2V1D	IDENTControl Compact control interface with Ethernet
IC-KP2-1HB6-2V15B	IDENTControl Compact control interface with PROFIBUS
IC-KP2-1HRX-2V1	IDENTControl Compact control interface with serial
IC-KP2-2HB17-2V1D	IDENTControl Compact control interface with Ethernet
IC-KP2-2HB18-2V1	IDENTControl Compact control interface with CC-Link
IC-KP2-2HB21-2V1D	IDENTControl Compact control interface with EtherCAT

Tags—Frequency Range LF



Standard Technical Data

Frequency	LF (125 kHz)
-----------	--------------

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

Model number	Special features	Memory size	Mounting	Degree of protection	Length L	Width W	Height H	Diameter D
IPC02-12 50pcs	High temperature	40 bit ROM	Non-conductive material	IP68			2.2	12.4
IPC02-16 50pcs	High temperature	40 bit ROM	Non-conductive material	IP68			3	16
IPC02-26-T6 10pcs	High temperature	40 bit ROM	Non-conductive material	IP68			4	26
IPC02-20P		40 bit ROM	Non-conductive material	IP68/IP69K			3	20
IPC02-30P	High temperature	40 bit ROM	Non-conductive material	IP68			3	30
IPC02-50 25pcs		40 bit ROM	Non-conductive material	IP68			3	50
IPC02-C1 10pcs		40 bit ROM	Non-conductive material	IP68	85.6	54	0.8	
IPC03-8		928 bit EEPROM, 32 bit ROM	On metal, in metal, non-conductive material	IP67			5	8
IPC03-10		928 bit EEPROM, 32 bit ROM	On metal, in metal, non-conductive material	IP67			4.5	10
IPC03-12.4 10pcs		928 bit EEPROM, 32 bit ROM	On metal, in metal, non-conductive material	IP67			6	12.1
IPC03-16GK		928 bit EEPROM, 32 bit ROM	On metal, in metal, non-conductive material	IP67			6	16
IPC03-30GK		928 bit EEPROM, 32 bit ROM	On metal, in metal, non-conductive material	IP67			20	30
IPC03-30P	High temperature	928 bit EEPROM, 32 bit ROM	Non-conductive material	IP68			3	30
IPC03-50P	High temperature	928 bit EEPROM, 32 bit ROM	Non-conductive material	IP68			5	50
IPC03-54-T8	High temperature	928 bit EEPROM, 32 bit ROM	On metal, non-conductive material	IP67			15	54
IPC03-58	High temperature	928 bit EEPROM, 32 bit ROM	On metal, non-conductive material	IP67			20.1	58
IPC03-C1 10pcs		928 bit EEPROM, 32 bit ROM	Non-conductive material	IP68	85.6	54	0.8	
IPC11-12 50pcs	High temperature	40 bit EEPROM	Non-conductive material	IP68			2	12.4
IPC11-50CD 10pcs		40 bit EEPROM	Non-conductive material	IP67			2	50

Tags—Frequency Range HF



Standard Technical Data

Frequency	HF (13.56 MHz)
HF protocol	ISO 15693

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

Model number	Special features	Memory size	Mounting	Degree of protection	Length L	Width W	Height H	Diameter D
IQC21-10 10pcs		896 bit EEPROM	On metal, in metal, non-conductive material	IP67			4.5	10
IQC21-16 50pcs		896 bit EEPROM	Non-conductive material	IP67			2.9	16
IQC21-30 25pcs	High temperature	896 bit EEPROM	Non-conductive material	IP68			3	30
IQC21-50 25pcs		896 bit EEPROM	Non-conductive material	IP68			3	50
IQC21-58		896 bit EEPROM	On metal, non-conductive material	IP67			20.1	58
IQC21-50F-T10	High temperature	896 bit EEPROM	Non-conductive material	IP68	51.5	51.5	6.4	
IQC21-15L15 500pcs		896 bit EEPROM	Non-conductive material	IP67	14.5	14.5	0.2	
IQC21-18L35-M 500pcs		896 bit EEPROM	On metal, non-conductive material	IP67	35	18	0.5	
IQC21-51L51 500pcs		896 bit EEPROM	Non-conductive material	IP67	50.8	50.8	0.2	
IQC22-22-T9 50pcs	High temperature	2000 bit EEPROM	Non-conductive material	IP68			3	22
IQC24-27-T12	High temperature	7936 bit EEPROM	Non-conductive material	IP67			4	27
IQC33-20 50pcs	High storage capacity		Non-conductive material	IP68			2.5	20
IQC33-30 25pcs	High temperature		Non-conductive material	IP68			2.5	30
IQC33-50 25pcs	High storage capacity		Non-conductive material	IP68			3	50
IQC33-ST22	High storage capacity		On metal, non-conductive material	IP68			20.5	22
IQC35-10 50pcs	High temperature	1280 bit EEPROM	Non-conductive material	IP68			2	10
IQC37-30			Non-conductive material	IP68			2.8	30
IQC37-F162			On metal, non-conductive material	IP67	70	40	22	

Tag—Frequency Range UHF



Standard Technical Data

Frequency	UHF (865 MHz ... 928 MHz)
-----------	---------------------------

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

Model number	Special features	Mounting	Region UHF	Degree of protection	Length L	Width W	Height H	Diameter D
IUC72-F152-M-FR1		On metal	ETSI (865 MHz ... 868 MHz)	IP67	60	14	12	
IUC72-F152-M-FR2		On metal	FCC (902 MHz ... 928 MHz)	IP68	60	14	12	
IUC76-F157-T17-M-FR1	High temperature	On metal	ETSI (865 MHz ... 868 MHz)	IP68	51	36.3	7.5	
IUC76-F157-T17-M-FR2	High temperature	On metal	FCC (902 MHz ... 928 MHz)	IP68	51	36.3	7.5	
IUC76-F157-T18-M-FR1	High temperature	On metal	ETSI (865 MHz ... 868 MHz)	IP68	51	36.3	7.5	
IUC76-F157-T18-M-FR2	High temperature	On metal	FCC (902 MHz ... 928 MHz)	IP68	51	36.3	7.5	
IUC76-F157-T19-M-FR1	High temperature	On metal	ETSI (865 MHz ... 868 MHz)	IP69K	51	36.3	7.5	
IUC76-F157-T19-M-FR2	High temperature	On metal	FCC (902 MHz ... 928 MHz)	IP69K	51	36.3	7.5	
IUC76-F203-M-FR1 10pcs	High temperature	On metal	ETSI (865 MHz ... 868 MHz)	IP68	31.7	12.8	4.8	
IUC76-F203-M-FR2 10pcs	High temperature	On metal	FCC (902 MHz ... 928 MHz)	IP68	31.7	12.8	4.8	
IUC76-F204-M-FR1 10pcs	High temperature	On metal, in metal	ETSI (865 MHz ... 868 MHz)	IP68	10	5	3	
IUC76-F204-M-FR2 10pcs	High temperature	On metal, in metal	FCC (902 MHz ... 928 MHz)	IP68	10	5	3	
IUC76-F205-M-FR1 10pcs	High temperature	On metal	ETSI (865 MHz ... 868 MHz)	IP68	12.8	7.1	3.1	
IUC76-F205-M-FR2 10pcs	High temperature	On metal	FCC (902 MHz ... 928 MHz)	IP68	12.8	7.1	3.1	
IUC76-F208-M-FR1 10pcs	High temperature	On metal, in metal	ETSI (865 MHz ... 868 MHz)	IP68	25	25	3	
IUC76-F208-M-FR2 10pcs	High temperature	On metal, in metal	FCC (902 MHz ... 928 MHz)	IP68	25	25	3	
IUC76-F209-M-FR1 10pcs	High temperature	In metal	ETSI (865 MHz ... 868 MHz)	IP68	12.8	7.1	3.1	
IUC76-F209-M-FR2 10pcs	High temperature	In metal	FCC (902 MHz ... 928 MHz)	IP68	12.8	7.1	3.1	
IUC76-28L90-M-FR1 25pcs		On metal	ETSI (865 MHz ... 868 MHz)	IP68	90	28	0.9	
IUC76-28L90-M-FR2 25pcs		On metal	FCC (902 MHz ... 928 MHz)	IP68	90	28	0.9	
IUC76-34-M-FR1	High temperature	On metal	ETSI (865 MHz ... 868 MHz)	IP68			6	34
IUC76-34-M-FR2	High temperature	On metal	FCC (902 MHz ... 928 MHz)	IP68			6	34
IUC76-50-FR1	High temperature	Non-conductive material	ETSI (865 MHz ... 868 MHz)	IP68			8	50
IUC76-50-FR2	High temperature	Non-conductive material	FCC (902 MHz ... 928 MHz)	IP68			8	50
IUC76-83L25-GBL 50pcs		Non-conductive material	Global (865 MHz ... 928 MHz)	IP68	83	25	3	
IUC77-F151-M-GBL		On metal	Global (865 MHz ... 928 MHz)	IP68	47.5	51.5	10	
IUC77-25L100-GBL 1000pcs		Non-conductive material	Global (865 MHz ... 928 MHz)	IP67	100	25	0.2	
IUC82-23L50-M-FR1 500pcs		On metal	ETSI (865 MHz ... 868 MHz)	IP67	50	22.5	1.5	
IUC82-23L50-M-FR2 500pcs		On metal	FCC (902 MHz ... 928 MHz)	IP67	50	22.5	1.5	

Series HH27



Standard Technical Data

Degree of protection	IP43
Ambient temperature (min)	0 °C
Ambient temperature (max)	45 °C
Housing length L	224 mm
Housing width W	88 mm
Housing height H	49 mm

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

Model number	Frequency	HF protocol
IPT-HH27	LF (125 kHz)	
IQT1-HH27	HF (13.56 MHz)	ISO 15693

Highlights

- Software can be tailored to individual identification tasks as required
- Function block for connecting directly to the control panel
- Robust design for indoor and outdoor use
- Quick, reliable identification for a high level of productivity
- Standard software with powerful features (e.g., write tags using batch file)

Brief Description

Durable, efficient, and tailor-made

One thing that manual quality control and several tasks in the process flow have in common is that they all require the use of mobile devices for the purpose of identifying and editing tags. RFID handhelds from Pepperl+Fuchs are the perfect solution, and are suitable for any application and all frequency ranges. The standard software in the devices offers a variety of powerful, highly efficient features, including the ability to write multiple tags using a batch file. A function block can be integrated to enable a direct connection to the controller for data transmission. Customer-specific software solutions are also possible for precise adaptation to individual application requirements. Thanks to their robust design, the handhelds are resistant to harsh ambient conditions and are perfect for indoor and outdoor use.

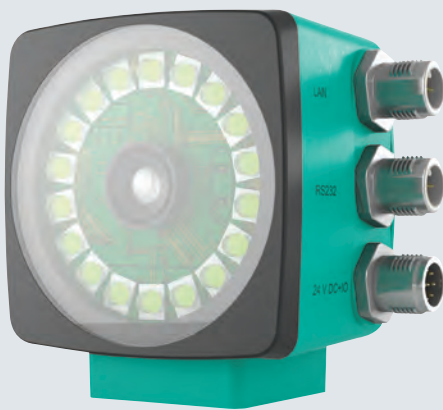
Accessories

IQZ-HH27-BAT	Lithium-polymer battery for IQT1-HH27 and IPT-HH27
IQZ-HH27-BAT1	Lithium ion battery for IQT1-HH27 and IPT-HH27
IQZ-HH27-CHARGER1	Docking station for IQT1-HH27 and IPT-HH27
IQZ-HH27-CHARGER2	Charger for IQZ-HH27-BAT

Stationary Optical Readers

High Performance in Downtime and at High Speed

Whether stationary or moving, printed or directly marked, stationary readers from Pepperl+Fuchs meet all the requirements for a cost-effective identification solution: Simple intuitive operation combined with a host of powerful functions.



Camera-Based Code Readers

The camera-based code readers are easy to operate and are equipped with countless functions for incredible versatility. The exceptionally powerful devices provide reliable reading results even under the harshest ambient conditions. They boast fast code reading, an ability to read codes even on highly reflective surfaces, and intuitive operating software.

Typical Applications

- Print and paper industry: print presence detection, logo comparison, and code reading in enveloping machines
- Automotive industry: track and trace applications for components, including those with direct markings
- Semiconductor industry: control of SMD placement
- Warehousing and material handling: code reading on boxes and trays

Your Benefits at a Glance

- Reliable 1-D/2-D code reading even on highly reflective surfaces such as film, plastic, and metal
- High-speed code reading of up to 10 m/s at 100 reads/s
- High depth of focus for code reading at various distances and in various sizes, using just one setting
- Simple handling and configuration thanks to the intuitive Vision Configurator operating software
- Automatic storage of error images for quick and easy fault repair

Technical Features

- Reading of all standard code symbologies, including DPM codes
- Powerful functions such as presence detection, logo comparison, and multi-window function, which enables the simultaneous application of all functions on up to four read fields
- Interfaces such as Ethernet TCP/IP, RS232, and I/Os for easy system integration



Barcode Scanners

Different code sizes, long distances, code corruption, and high speeds. When it comes to reading barcodes, each application has its own special requirements. With a portfolio of four series, Pepperl+Fuchs offers the optimal barcode scanner for every requirement profile—even for more challenging applications such as low-temperature environments.

Typical Applications

- Warehousing and material handling: code reading on boxes, pallets, and trays
- Print and paper industry: code reading in enveloping machines
- Packaging industry: verification and assignment of products to outer packaging
- Automotive industry: Odette label reading

Your Benefits at a Glance

- Optimized portfolio with especially compact designs for confined space conditions, e.g., in packaging machines
- High scan rates of up to 1200 scans per second for the fastest processing speeds
- Automatic and programmable focus setting for continuous process flows
- Reliable code reconstruction for reading damaged or rotated barcodes
- Wide range of applications through an extended temperature range down to -35 °C

Technical Features

- Large read distances of up to 2000 mm
- High scan rates of up to 1200 scans per second
- Reading of especially small codes down to 0.15 mm
- Networking of up to 32 scanners to form an integrated complete solution
- Rugged aluminum housing versions available

Stationary Optical Readers

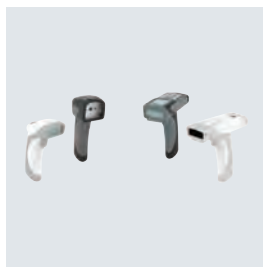
Contents



OPC Series
Page 313



VB14/VB34 Series
Page 314



OHV Series
Page 315



OIT Series
Page 316

OPC Series



Standard Technical Data

Light type	White LED
Output type	PNP
Voltage type	DC
Operating voltage (min)	24 V
Operating voltage (max)	24 V
Connection type	M12 connector plug
Housing width W	70 mm
Housing height H	70 mm

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

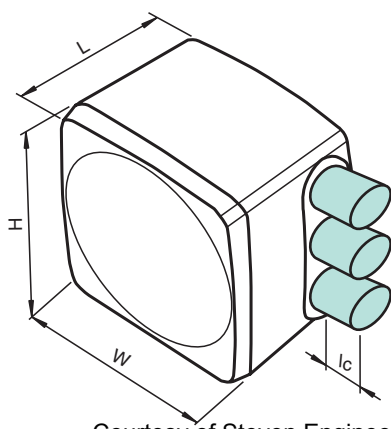
Model number	Detection range [mm]	Interface	Length L
OPC70P-F201-R2-45	90	Ethernet, RS-232	53
OPC120P-F201-B17	180	Ethernet, PROFINET	53
OPC120P-F201-R2	180	Ethernet, RS-232	53
OPC120W-F200-R2	180	Ethernet, RS-232	50

Highlights

- Reliable 1-D/2-D code reading on highly reflective surfaces
- High-speed code reading of up to 10 m/s at 100 readings/s
- Intelligent functions such as print presence detection, logo comparison, and multi-window

Brief Description

Whether reading standard 1-D and 2-D codes or reading at high speeds, the stationary readers in the OPC120 series are true performance artists, covering the entire bandwidth of demanding applications perfectly. Even under the most challenging conditions, these readers deliver a top performance both when stationary and at high speed. Features such as print presence detection, logo comparison, and multi-window with up to four windows ensure optimal efficiency and reliability in the reading process. In addition, the devices are incredibly user-friendly, offer an automatic fault pattern memory, and are capable of reading codes on reflective surfaces.



Accessories

PCV-MB1	Mounting bracket for PCV* read head
V15S-G-5M-PUR-ABG	Single-ended male cordset, M12, 5-pin, shielded, PUR cable
V19-G-0,2M-YOPC-0,2M-V1S/V31-G	Y-splitter cordset
V19-G-2M-PUR-ABG	Single-ended female cordset, M12, 8-pin, shielded, PUR cable
V19-G-ABG-PG9	Single-ended female cordset, M12, 8-pin, shielded, field-attachable
V1SD-G-2M-PUR-ABG-V45-G	Cordset, M12 to RJ-45, PUR cable, 4-pin, CAT5e
V1SD-G-2M-PUR-ABG-V45X-G	Cordset, M12 to RJ-45, PUR cable, 4-pin, CAT5e

VB14/VB34 Series



Standard Technical Data

Light type	Red laser diode
Interface	RS-232, RS-485
Voltage type	DC
Operating voltage (max)	30 V
Connection type	Sub-D connector plug

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

Model number	Detection range [mm]	UB (min)	Length L	Width W	Height H
VB14N-300	300	10	84	68	34
VB14N-300-R	300	10	84	68	34
VB14N-400-T	400	10	84	68	34
VB14N-400-T-R	400	10	84	68	34
VB14N-600	600	10	84	68	34
VB14N-600-R	600	10	84	68	34
VB14N-600-T	600	10	84	68	34
VB14N-600-T-R	600	10	84	68	34
VB34-2500	2500	15	110	113	99
VB34-2500-OM	2000	15	180	113	99
VB34-2500-OM-P	2000	15	180	113	99
VB34-2500-P	2500	15	110	113	99

Highlights

- Networking of up to 32 scanners for high-speed applications
- High scan rates of up to 1200 scans per second for the fastest processing speeds
- Automatic and programmable focus setting for continuous process flows
- Reliable code reconstruction for reading damaged or rotated barcodes
- Wide range of applications through an extended temperature range of up to -35 °C

Brief Description

Barcodes are now ubiquitous in industry and trade—but when it comes to reading barcodes, every application has its own special requirements. Different sizes and distances, variable speeds and varying levels of damage: Pepperl+Fuchs has got this vast spectrum of requirements covered through its two extremely powerful series. Read distances of up to 2.5 meters, scan rates of up to 1200 scans per second, and code sizes of just 0.2 millimeters are processed with complete accuracy and the highest level of efficiency. For high-speed applications, up to 32 scanners can be networked to form an integrated overall solution. A reliable process flow and optimal read performance is guaranteed at all times, even at temperatures as low as -35 °C.

Accessories

CBX100	Connection box for barcode scanners
CBX500-KIT-B17	PROFINET connection box for barcode scanners
CBX500-KIT-B19-IP65	EtherNet/IP connection box for barcode scanners
CBX500-KIT-B6	PROFIBUS connection box for barcode scanners
DM-VB14N-102	Deviation mirror for VB14 series barcode scanners
DM-VB14N-90	Deviation mirror for VB14 series barcode scanners
OM-VB14N	Oscillating mirror for VB14N series barcode scanners

OHV Series



Standard Technical Data

Light type	Red LED
Voltage type	DC

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

Model number	Detection range [mm]	Interface	Connection type	Length L	Width W	Height H
OHV1000-F223-R2	200	RS-232	Fixed cable	93	53	151
OHV100-F222-R2	310	RS-232	Fixed cable	70	50	140
OHV200-F220-B15	310	Bluetooth		130	51	28
OHV200-F221-B15	310	Bluetooth		130	51	135

Highlights

- Excellent read quality, reliable 1-D/2-D code reading on reflective surfaces
- Versatile applications thanks to a sturdy housing and high degree of protection (IP65)
- Highest level of process reliability through user feedback (acoustic, tactile, and visual signals)
- Can be programmed individually for specific application requirements

Brief Description

OHV series handheld readers offer outstanding reading performance, simple operation and perfect adaptation to customer-specific requirements. The devices read 1-D and 2-D codes reliably even on reflective surfaces, covering all common code symbologies. A patented dual lens allows codes of various sizes to be read using just one setting. To ensure optimal process reliability, each read operation is confirmed by acoustic, tactile, and visual feedback. Various programming options allow the device to be effectively adapted to the individual application, either via control codes on the device itself, via the Vision Configurator graphical user interface, or via JavaScript. This means that the manual handheld readers from Pepperl+Fuchs offer perfect solutions for any application requirements in the field of mobile identification.

Accessories

OHV-BAT	Lithium ion battery, 1300 mAh
OHV-BRACKET	Bracket for OHV100-F222-R2
OHV-CHARGER-B15	Charger for OHV200 with built-in Bluetooth modem
OHV-F230-B17	PROFINET gateway for OHV handheld
OHV1000-BRACKET	Bracket for OHV1000-F223-R2
V19S-G-1,7/3M-PVC-V50	Adapter cable, M12 8-pin to RS 232
V45-G-2M-PVC-ABG-USB-G	Adapter cable, RJ50 to USB
V45-G-2M-PVC-SUBD9	Adapter cable, RJ45 to RS 232

Optical High-Temperature Identification

High Performance under Extreme Conditions

Cyclic changes in temperature, continuous high temperatures, and the effects of dust and paint place high demands on materials and technology. The durable OIT high-temperature identification system was developed with these demands in mind. The system ensures a reliable read performance and therefore smooth process flows, even at temperatures of up to 500 °C.



Typical Applications

- Automotive industry: identification in bodyshell production, painting lines, electroplating plants, and drying systems
- Identification in pigment and paint processing industries
- Baking pan identification in bakeries

Your Benefits at a Glance

- Rugged, durable solution with heat-resistant code sheets for temperatures of up to 500 °C
- Reliable identification, even on contaminated code sheets
- Integrated diagnostic function for reliable process flows
- Maintenance-free with one-piece housing concept and no additional components
- Simple connection to all standard controllers

Technical Features

- Identification of up to 1 million objects via robust code sheets
- Easy system integration via Ethernet interface
- Long read distances of up to 1700 mm
- Rugged powder-coated aluminum die-cast housing

OIT Series



Standard Technical Data

Light type	Infrared LED
Interface	Ethernet
Output type	PNP
Voltage type	DC
Operating voltage (min)	24 V
Operating voltage (max)	24 V
Connection type	Harting connector plug
Degree of protection	IP64
EAC	■

For detailed data and description, see the datasheet. Further products can be found online at www.pepperl-fuchs.com.

Model number	Detection range [mm]	Length L	Width W	Height H
OIT200-F113-B12-CB	200	297	188	116
OIT300-F113-B12-CB2	270	171	261	101
OIT500-F113-B12-CB	450	171	261	101
OIT500-F113-B12-CB3	450	171	261	101
OIT1500-F113-B12-CB	1700	171	261	101

Highlights

- Heat-resistant code sheets for temperatures up to 500 °C
- Reliable identification, even on contaminated code sheets
- Integrated diagnostic function for reliable process flows
- Maintenance-free with one-piece housing, no additional components
- Simple connection to all standard controllers

Brief Description

Drying systems, painting lines, electroplating plants, and bakeries operate under special production conditions in terms of temperature and contamination. Cyclical temperature changes, continuous temperatures, and the effects of dust and paint place high demands on materials and technology. Specifically designed to withstand these extreme conditions, the robust OIT high-temperature identification system from Pepperl+Fuchs ensures smooth process sequences under the toughest conditions. Highly reliable read performance is guaranteed, even at temperatures up to 500 °C.

Accessories

OIC-C10V2A-CB1	Read-only tag for optical high-temperature identification system, stainless steel
OIC-C11V4A-CB2	Read-only tag for optical high-temperature identification system, stainless steel
OIZ-FG500	Replacement glass for OIT300, OIT500, and OIT1500
V1S-G-10M-PVC	Single-ended male cordset, M12, 4-pin, PVC cable
V45-G	Single-ended male cordset, field-attachable
V45-GP	Push-pull single-ended male cordset, field-attachable
V45-GP-10M-PUR-ABG-V45-G	Cordset, RJ-45 to RJ-45, PUR cable
V8HAN-G	Single-ended female cordset, Harting, 8-pin, field-attachable