



## Stationary read device OPC120W-F200-R2-Ex

- Explosion protection for use in Zone 1, Zone 2, Zone 21 and Zone 22
- Reads 1-D and 2-D codes at high speeds of up to 6 m/s at 30 readings/s
- High depth of focus
- Code quality index output
- Logo comparison
- Presence detection

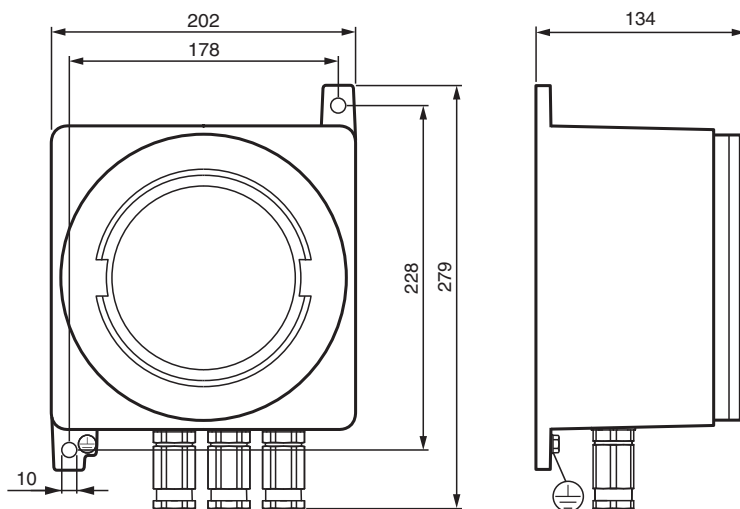
Stationary read device for hazardous area



### Function

With the OPC120, Pepperl+Fuchs provides the solution to code reading and detection tasks for many industries and applications. Whether reading 1D and 2D codes at high speed, at varying intervals, reflective surfaces or a variety of detection tasks, with the OPC120 you always have the right Vision Sensor at your disposal.

### Dimensions



### Technical Data

#### General specifications

Light type	Integrated LED lightning (white)
Symbologies	Data Matrix, Code 39, Code 128, Int 2 of 5, EAN13, Pharmacode
Read distance	60 ... 160 mm Nominal distance: 120 mm
Reading field	Minimum read field: 28 mm x 45 mm Read field at nominal distance: 44 mm x 70 mm Maximum read field: 60 mm x 95 mm
Modul size	Minimum module size: 0.3 mm
Evaluation frequency	up to 30 Hz
Target velocity	triggered max. 6 m/s
Data Matrix	
Symbol size	rectangular up to 144 x 144 modules rectangular up to 16 x 48 modules
Data format	ASCII, C40, Text, X12, Edifact, Base 256 , all according to ISO 646

Release date: 2022-03-09 Date of issue: 2022-03-09 Filename: 70114069\_eng.pdf

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

Pepperl+Fuchs Group  
www.pepperl-fuchs.com

USA: +1 330 486 0001  
fa-info@us.pepperl-fuchs.com

Germany: +49 621 776 1111  
fa-info@de.pepperl-fuchs.com

Singapore: +65 6779 9091  
fa-info@sg.pepperl-fuchs.com

**PF** PEPPERL+FUCHS

## Technical Data

Orientation	omnidirectional		
<b>Nominal ratings</b>			
Camera			
Type		CMOS , Global shutter	
Number of pixels		752 x 480 pixels	
Gray scale		256	
Image recording		real-time , Program-controlled or triggered externally	
<b>Functional safety related parameters</b>			
MTTF <sub>d</sub>		40.5 a	
Mission Time (T <sub>M</sub> )		8 a	
Diagnostic Coverage (DC)		0 %	
<b>Indicators/operating means</b>			
Operation indicator		LED green: Ready for operation	
LED indication		for good/poor reading	
<b>Electrical specifications</b>			
Operating voltage	U <sub>B</sub>	24 V DC ± 15% , PELV	
No-load supply current	I <sub>0</sub>	max. 250 mA	
Power consumption	P <sub>0</sub>	6 W	
<b>Interface</b>			
Interface type		serial , RS 232	
Transfer rate		max. 115.2 kBit/s	
Cable length		max. 30 m	
<b>Interface 1</b>			
Interface type		Ethernet	
Protocol		TCP/IP	
Transfer rate		100 MBit/s	
Cable length		max. 30 m	
<b>Input</b>			
Input voltage		to be applied externally 24 V ± 15% PELV	
Number/Type		Trigger	
Input current		approx. 10 mA at 24 V DC	
Switching threshold		low: < 10 V, high: > 15 V	
Cable length		max. 30 m	
<b>Output</b>			
Number/Type		GOOD, BAD, Matchcode	
Switching type		PNP	
Switching voltage		to be applied externally 24 V ± 15 % PELV	
Switching current		100 mA each output	
Cable length		max. 30 m	
<b>Compliance with standards and directives</b>			
Standard conformity			
Noise immunity		EN 61326-1	
Emitted interference		EN 61000-6-4	
Degree of protection		EN 60529	
Laser class		IEC 60825-1:2007	
<b>Approvals and certificates</b>			
IECEx approval		IECEx INE 14.0042X	
ATEX approval		INERIS 14 ATEX 0035X Device type: GUBW1.D.OS-OPC120W-F200-R2	
Marking		Ⓜ II 2 GD Ex db IIC T6 Gb Ex tb IIIC T85°C Db	
<b>Ambient conditions</b>			
Ambient temperature		0 ... 37 °C (32 ... 98.6 °F)	

Release date: 2022-03-09 Date of issue: 2022-03-09 Filename: 70114069\_eng.pdf

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

Pepperl+Fuchs Group  
www.pepperl-fuchs.comUSA: +1 330 486 0001  
fa-info@us.pepperl-fuchs.comGermany: +49 621 776 1111  
fa-info@de.pepperl-fuchs.comSingapore: +65 6779 9091  
fa-info@sg.pepperl-fuchs.com

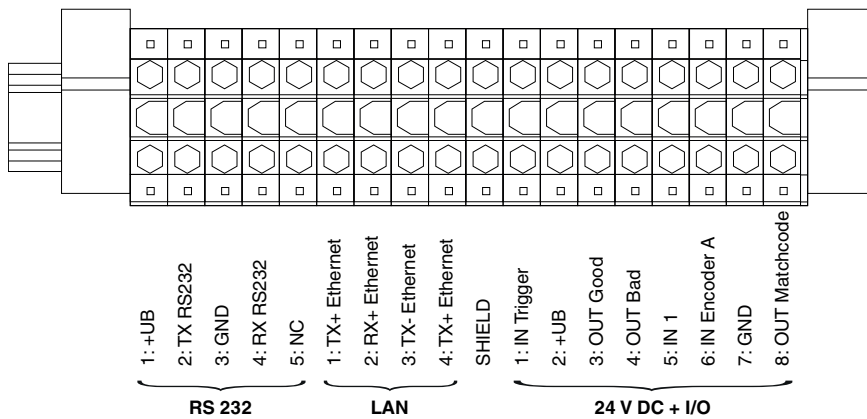
**PEPPERL+FUCHS**

## Technical Data

### Mechanical specifications

Connection type	Connection terminals, max. conductor cross-section 2.5 mm <sup>2</sup>
Conductor cross section	0.13 ... 2.5 mm <sup>2</sup>
Cable gland	3 ... 8.5 mm
Enclosure cover	threaded round cover
Cover fixing	flamepath thread
Cover seal	none, O-ring for IP66/67
Flamepath grease	petroleum jelly
Degree of protection	IP66 (IP66/67 with O-ring)
Material	
Enclosure	aluminum alloy
Glass	thermo-resistant tempered glass
Finish	epoxy coated RAL 7005 (grey)
Mass	approx. 7 kg
Grounding	M6 external grounding points

## Connection



## Accessories

	<b>V1SD-G-2M-PUR-ABG</b>	Ethernet bus cable, M12, PUR cable, 4-pin, CAT5e
	<b>V45-G-C5-GN3M-PUR-E1S</b>	Ethernet bus cable male cordset single-ended RJ45, 4-pin, PUR cable green, Cat5e, shielded, UL approved, drag chain suitable

Release date: 2022-03-09 Date of issue: 2022-03-09 Filename: 70114069\_eng.pdf