

High temperature identification system

OIT500-F113-B17-CB



- High-temperature code carrier up to 500 °C (932 °F)
- PROFINET interface with integrated switch
- Connection to Ethernet TCP/IP
- Optional reading of CB3 code plates
- Sturdy and compact design
- Integrated illumination
- High operating range
- Large sensing range
- High depth of focus

Optical high temperature identification system, 300 to 450 mm

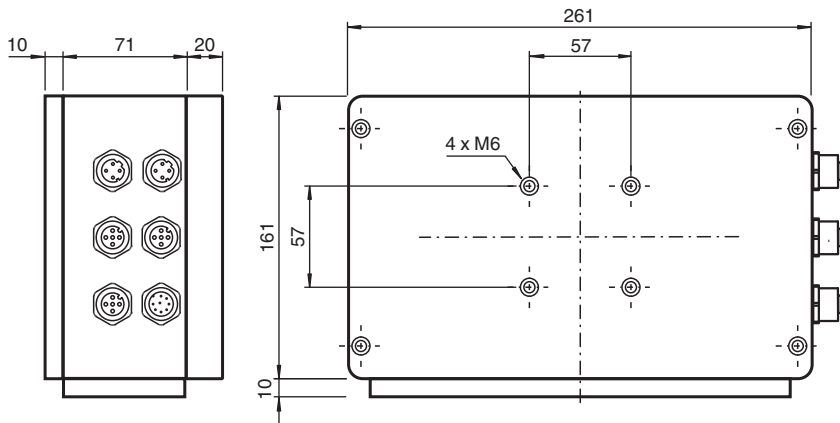


Function

The OIT500-* stationary read device is an optical identification system that works using industrial vision methods and is used in automated manufacturing processes. The ambient conditions in painting facilities in particular, for example the cyclical temperature changes, often make the use of read-only tags with electronic components difficult if not impossible. For the OIT high-temperature identification system, read-only tags of solid metal plates with a perforated matrix are used, which are designed for use at temperatures of up to 500 °C and suitable for high mechanical stress.

Simple installation and commissioning without complicated, time-consuming Teach-In processes enable rapid entry. The integrated PROFINET interface enables simple integration into the controller. A scratch-resistant, replaceable quartz glass panel and sturdy metal housing make the OIT500-* a robust, efficient identification system.

Dimensions



Technical Data

General specifications

Light source	Integrated LED lightning
Light type	Infrared
Symbologies	CB1: perforated matrix 6 x 6 decimal digits
Read distance	CB1: 300 ... 520 mm
Reading field	335 mm x 185 mm at max. read distance
Evaluation frequency	5 Hz
Target velocity	triggered max. 1.5 m/s

Functional safety related parameters

MTTF _d	86 a
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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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Technical Data

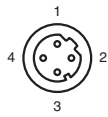
Mission Time (T _M)		20 a
Diagnostic Coverage (DC)		0 %
Indicators/operating means		
LED indication		status , Function , communication
Electrical specifications		
Operating voltage	U _B	24 V DC ± 15% , PELV
Operating current	I _B	200 mA without output drivers
Interface 1		
Interface type		100 BASE-TX
Protocol		PROFINET IO Real-Time (RT) Conformance Class B Netload Class III
Transfer rate		100 Bit/s
Interface 2		
Interface type		Ethernet
Protocol		TCP/IP
Transfer rate		100 MBit/s
Input		
Input voltage		24 V DC low: < 8 V, high: > 12 V
Number/Type		2 trigger input and supply max. 4 switching inputs
Output		
Number/Type		supply max. 200 mA and 1 control output for External lighting max. 4 switching outputs programmable
Switching voltage		operating voltage minus voltage drop typ. 1.1 V
Switching current		100 mA each output
Conformity		
Shock resistance		EN 60068-2-27:2009
Vibration resistance		EN 60068-2-6:2008
Emitted interference		EN 61000-6-4:2007+A1:2011
Noise immunity		EN 61000-6-2:2005
Photobiological safety		EN 62471:2008 exempt group #224258
Approvals and certificates		
CE conformity		CE
Ambient conditions		
Ambient temperature		0 ... 60 °C (32 ... 140 °F)
Storage temperature		-20 ... 75 °C (-4 ... 167 °F)
Mechanical specifications		
Degree of protection		IP67
Connection		8-pin, M12x1 connector, standard (supply+IO) 2 x 4-pin, M12x1 socket, D-coded (LAN) 3 x 5-pin, M12x1 socket, A-coded (Trigger , External lighting)
Material		
Housing		diecast aluminum powder coated
Mass		approx. 4000 g

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Connection

4-pin M12 socket, D-coded

(PROFINET 1 & 2)

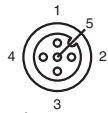


Pin	Signal
-----	--------

- | | |
|---|------|
| 1 | Tx + |
| 2 | Rx + |
| 3 | Tx - |
| 4 | Rx - |

5-pin M12 socket

(Trigger 1 & 2)

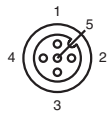


Pin	Signal
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- | | |
|---|-------------------|
| 1 | 24 V power supply |
| 2 | not connected |
| 3 | Ground |
| 4 | Trigger signal |
| 5 | not connected |

5-pin M12 socket

(external illumination)

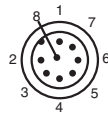


Pin	Signal
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- | | |
|---|----------------------|
| 1 | 24 V power supply |
| 2 | not connected |
| 3 | Ground |
| 4 | Illumination control |
| 5 | not connected |

8-pin M12 plug

(Power & IO's)



Pin	Signal
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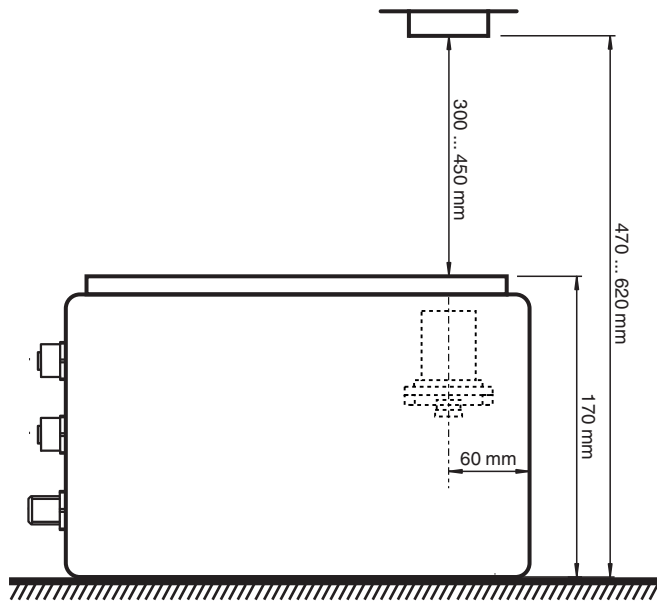
- | | |
|---|-------------------|
| 1 | I/O 1 |
| 2 | 24 V power supply |
| 3 | not connected |
| 4 | not connected |
| 5 | I/O 2 |
| 6 | I/O 3 |
| 7 | Ground |
| 8 | I/O 4 |

Accessories

	OIC-C10V2A-CB1	Code carrier for optical high-temperature identification system, stainless steel
	V19-G-2M-PUR-ABG	Female cordset single-ended M12 straight A-coded, 8-pin, PUR cable grey, shielded
	V1SD-G-2M-PUR-ABG-V45-G	Connection cable, M12 to RJ-45, PUR cable 4-pin, CAT5e
	V19-G-ABG-PG9	Female connector, M12, 8-pin, shielded, field attachable
	OIZ-FG500	Replacement glass for series OIT300, OIT500 and OIT1500
	Vision Configurator	Operating software for camera-based sensors
	V1S-G-2M-PUR	Male cordset single-ended M12 straight A-coded, 4-pin, PUR cable grey

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Installation Conditions



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