Function

The stationary reader is a reading system for the recognition of data matrix codes. With a powerful signal processor and optimized decoding algorithms, the device delivers delivers extremely high reading speeds.
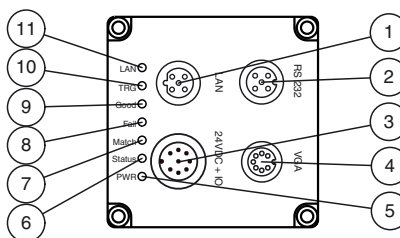
The configuration is easy and comfortable via the standard Ethernet interface using a standard web browser or via serial port.
The device is supported by an VGA video output. In addition, the device has an integrated error image memory.

Typical operative range of stationary readers are:
- Document handling
- Printing machines
- Identification in packaging and warehousing technology
- Detection of PCBs

Indicating / Operating means

1	Socket LAN
2	Socket RS 232
3	Connector 24VDC + IO
4	Socket VGA
5	PWR
6	Status
7	Match
8	Fail
9	Good
10	TRG
11	LAN

Electrical connection

RS 232

Pin	Signal
1	+UB
2	TX RS232
3	GND
4	RX RS232
5	IN 5 / OUT 3

VGA

Pin	Signal
1	OUT VSYNC
2	GND
3	OUT R
4	OUT G
5	GND
6	OUT B
7	OUT HSYNC

LAN

Pin	Signal
1	TX+ Ethernet
2	RX+ Ethernet
3	TX- Ethernet
4	RX- Ethernet

(24 V DC + I/O)

Pin	Signal
1	IN TRG / OUT 1
2	+UB
3	OUT Good / IN 1
4	OUT Fail / IN 2
5	IN 3
6	IN 4 / OUT 2
7	GND
8	OUT Match

Model Number

ODT-MAC431-LD-WH-MC

Stationary multicode read device for all common 1D, 2D, and Pharmacodes at speeds of 10 m/s, angled line of vision, side illumination, VGA resolution, Ethernet, VGA output, RS 232 interface

Features

- All common 1D or 2D codes can be read
- 30 scans per second
- High passage speed 10 m/s
- VGA output
- Integrated error image memory

CE

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

Pepperl+Fuchs Group | USA: +1 330 486 0001 | Germany: +49 621 776 4411 | Singapore: +65 6779 9091
www.pepperl-fuchs.com | fa-info@us.pepperl-fuchs.com | fa-info@de.pepperl-fuchs.com | fa-info@sg.pepperl-fuchs.com

PEPPERL+FUCHS
SENSING YOUR NEEDS

1

Technical data

General specifications

Light type	Integrated LED lightning (white)
Symbologies	Maxi Code, PDF 417, Data Matrix, QR Code, MicroPDF 417, GoCode, UCC Composite, Aztec Code, Code 39, Code 128, UPC, EAN, JAN, Int 2 of 5, Codabar, Code 93, UCC RSS, POSTNET, PLANET, Japanese Post, Australia Post, Royal Mail, RM4SCC, KIX Code, Codablock, Pharmacode
Read distance	100 mm
Depth of focus	± 5 mm
Reading field	max. 50 mm x 30 mm
Modul size	≥ 0.33 mm
Sensor principle	Camera system
Evaluation frequency	max. 30 Hz
Target velocity	triggered ≤ 10 m/s

Nominal ratings

Camera		
Type		CMOS , Global shutter
Number of pixels		752 x 480 pixels
Gray scale		256
Image recording		real-time , Program-controlled or triggered externally

Indicators/operating means

Operating display	LED green: Ready for operation
LED indicator	for good/poor reading , Trigger , LAN , Match code

Electrical specifications

Operating voltage	U_B	24 V DC ± 15% , PELV
No-load supply current	I_0	max. 250 mA
Power consumption	P_0	6 W

Interface

Physical	Ethernet
Protocol	TCP/IP
Transfer rate	100 MBit/s
Cable length	max. 30 m

Output

Number/Type	4 electronic outputs, PNP
Switching voltage	24 V ± 15 %
Switching current	100 mA each output
Cable length	max. 30 m

Output 1

Output type	Video output, RGB (75 Ohm), 1 Vpp
Resolution	VGA, 800 x 600 pixels
Cable length	2 m

Ambient conditions

Ambient temperature	0 ... 45 °C (32 ... 113 °F)
Storage temperature	-20 ... 60 °C (-4 ... 140 °F)

Mechanical specifications

Protection degree	IP65
Connection	8-pin, M12x1 connector, standard (supply+IO) M12 x 1 female connector, 5-pin, standard (IO) 4-pin, M12x1 socket, standard (LAN) Video: 7-pin socket
Material	
Housing	powder coated diecast zinc
Mass	approx. 760 g

Compliance with standards and directives

Directive conformity	
EMC Directive 2004/108/EC	EN 61326-1 , EN 61000-6-4
Standard conformity	
Noise immunity	EN 61326-1
Emitted interference	EN 61000-6-4
Protection degree	EN 60529
Laser class	IEC 60825-1:2007

Accessories

V19-G-2M-PUR-ABG
Female cordset, M12, 8-pin, shielded, PUR cable

V15S-G-5M-PUR-ABG
Male cordset, M12, 5-pin, shielded, PUR cable

V1SD-G-2M-PUR-ABG-V45-G
Connection cable, M12 to RJ-45, PUR cable 4-pin, CAT5e

V1SD-G-2M-PUR-ABG-V45X-G
Connection cable, M12 to RJ-45, PUR cable 4-pin, CAT5e

V19-G-2,5M-PUR-ABG-SUBD25
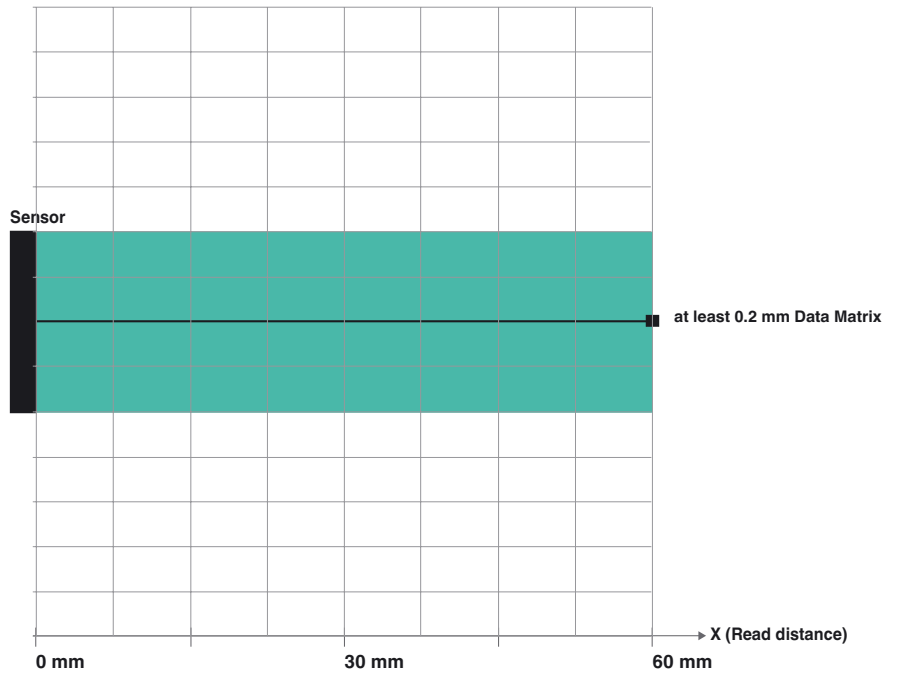Connection cable, M12 to SUB-D, PUR cable 8-pin
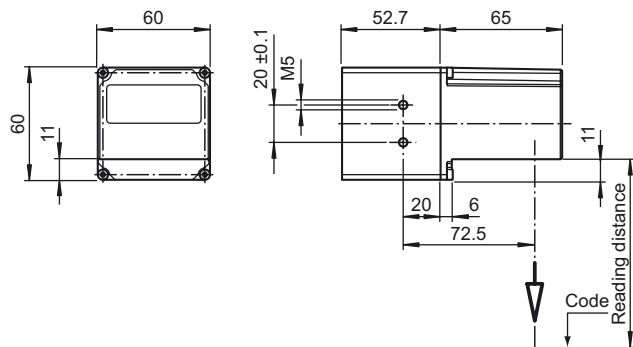
ODZ-MAC-CAB-VIDEO
Video cable VGA

Other suitable accessories can be found at www.pepperl-fuchs.com

PEPPERL+FUCHS
SENSING YOUR NEEDS

Read range for various symbologies

at least 0.2 mm Data Matrix

Sensor

0 mm　　　　　　　30 mm　　　　　　　60 mm

X (Read distance)

Dimensions

60

60

11

20 ±0.1

M5

52.7　　　　65

20　　6

72.5

11

Reading distance

Code

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

Pepperl+Fuchs Group　　　　USA: +1 330 486 0001　　　　Germany: +49 621 776 4411　　　　Singapore: +65 6779 9091
www.pepperl-fuchs.com　　　fa-info@us.pepperl-fuchs.com　　fa-info@de.pepperl-fuchs.com　　fa-info@sg.pepperl-fuchs.com

PEPPERL+FUCHS
SENSING YOUR NEEDS

3