



**Smart cameras**  
IVC-2D, RS-485 Fast Ethernet (10/100 Mbit/s):  
TCP/IP, UDP/IP, EtherNet/IP OPC server included  
, IVC-2D HighRes

IVC-2DM1121



## Smart cameras

**IVC-2D, RS-485 Fast Ethernet (10/100 Mbit/s): TCP/IP, UDP/IP,  
EtherNet/IP OPC server included , IVC-2D HighRes**

**Model Name** > [IVC-2DM1121](#)  
**Part No.** > [1028407](#)



### At a glance

- Suitable for advanced inspections and measurements
- Flexible working distance and field of view
- Stand-alone operation, no PC needed
- IP 65 rating
- Easy-to-use interface with more than 110 software tools
- Simple interfacing with PLCs, robots and control systems that support EtherNet/IP or OPC
- Available in three different resolutions from fast VGA (0.3 MP) to high-resolution UXGA (1.9 MP)

### Your benefits

- The IVC-2D's flexibility ensures optimal setup for individual application needs
- The 1.9 MP resolution enables inspection of fine details with high repeatability
- IP 65 rating makes the system suitable for industrial environments
- Easy-to-use interface ensures fast application development, saving time and reducing costs
- The camera's OPC server and EtherNet/IP interface enable easy integration with PLCs, robots and control systems
- Stand-alone operation reduces installation complexity compared to PC-based vision
- A wide range of camera-controlled lighting makes it easy to create a complete solution



### Features

Task:	Positioning Inspection Reading Measuring
Technology:	2D, Image analysis, Snapshot
Example field of view (H x W):	See Field of view diagram
Offline support:	Emulator
Spectral range:	Ca. 400 nm ... 750 nm

### Performance

Image sensor:	1/3" CCD, electronic shutter
Processor:	800 MHz
Memory:	128 MB RAM, 16 MB flash

Maximum performance: 24 Hz  
Resolution: 1,024 px x 768 px

## Interfaces

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Operator interfaces: Application specific operator interfaces can be created using ActiveX (COM) or as web page. Included OPC server enables data exchange with e.g. SCADA systems.

Configuration software: IVC Studio

Data store and retrieve: Images and data can be stored to and retrieved from flash and external FTP servers

Communication interfaces: RS-485  
Fast Ethernet (10/100 Mbit/s): TCP/IP, UDP/IP, EtherNet/IP  
OPC server included

Digital inputs: 4 program controlled inputs (1 trigger input), HIGH = 10 V ... 28.8 V

Digital outputs: 3 B-type program controlled outputs  
Total output load < 100 mA  
Trigger output

## Mechanics/electronics

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Connectors: M12, 4-pin female connector, D-coded (Ethernet)  
M12, 8-pin female connector (RS-485)  
M12, 8-pin male connector (power I/O)

Connector material: Nickel plated brass

Supply voltage: 24 V DC ± 20 %

Power consumption: < 400 mA Without output load

Ripple: < 5 Vpp

Enclosure rating: IP 54 IP 65 with lens protection hood

Protection class: II, III

Housing material: Anodized aluminum

Weight: 505 g

Dimensions (L x W x H): 161 mm x 60 mm x 55 mm

Optics: C or CS-mount

## Ambient data

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Shock load: 15 g, 3 x 6 directions

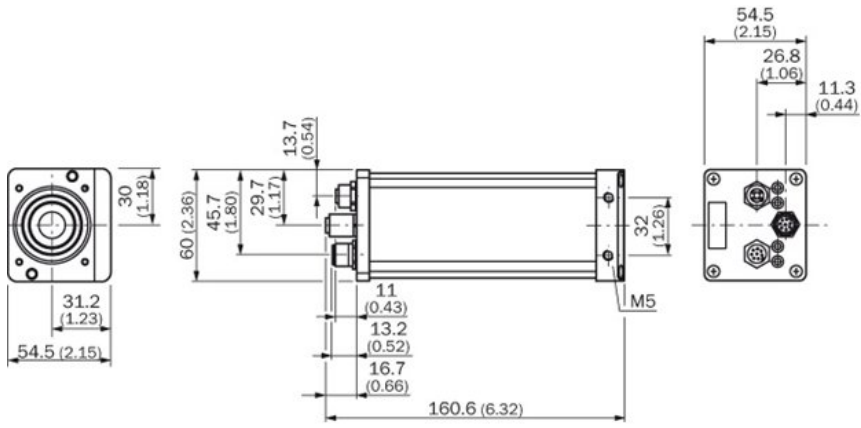
Vibration load: 5 g, 58 Hz ... 150 Hz

Ambient operating temperature: 0 °C ... 50 °C <sup>1)</sup>

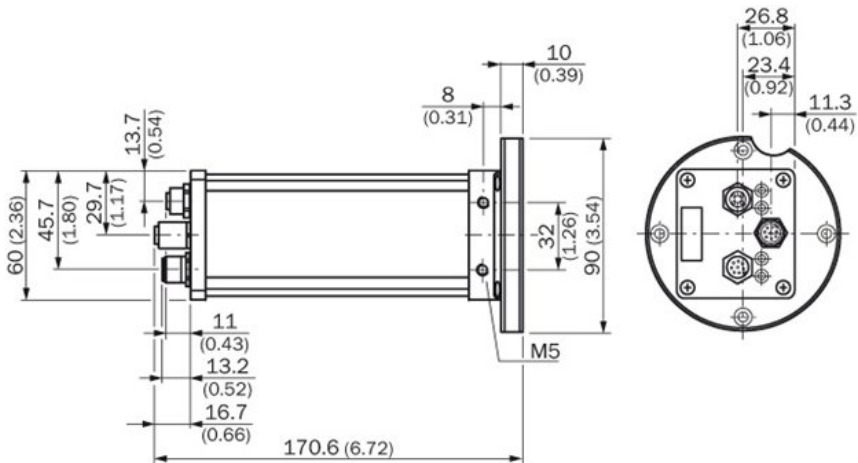
Ambient storage temperature: -20 °C ... 70 °C <sup>2)</sup>

<sup>1) 2)</sup> Relative humidity: 35 % ... 85 %, 95 % at storage

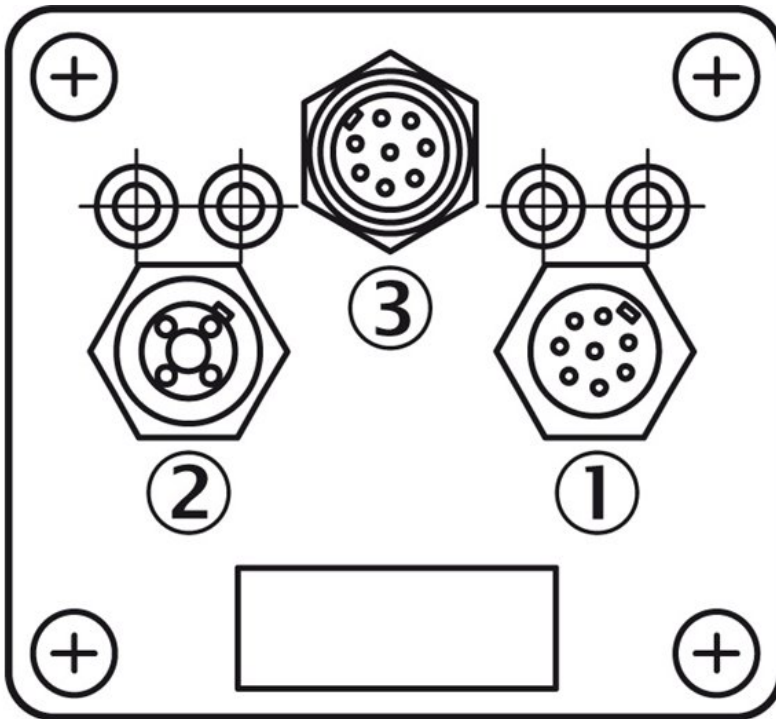
Dimensional drawing



Dimensional drawing with adapter plate for ring light

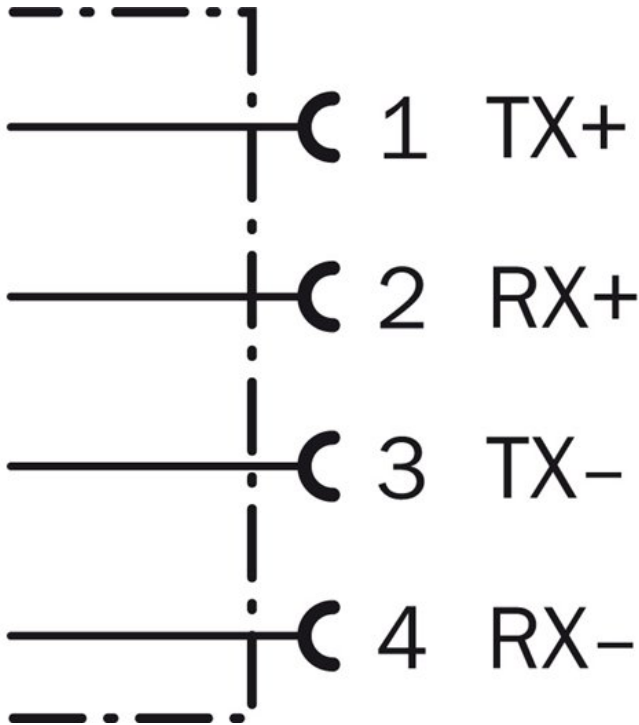


Connection type



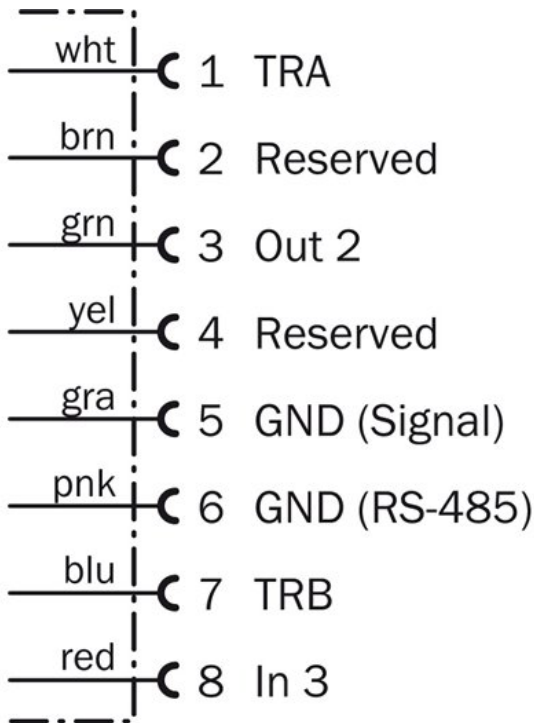
- [1] Power I/O: M12, 8-pin, male (illumination trigger output)
- [2] Ethernet: M12, 4-pin, D-coded, female
- [3] M12, 8-pin female connector (RS-485)

Connection diagram Ethernet



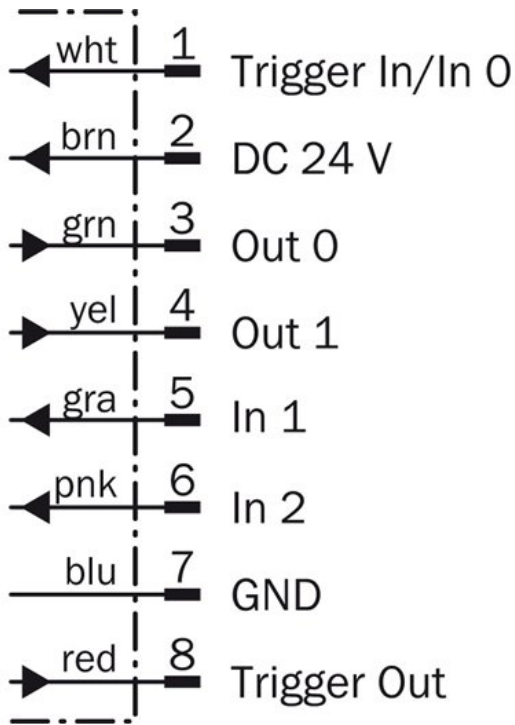
Connection diagram RS-485

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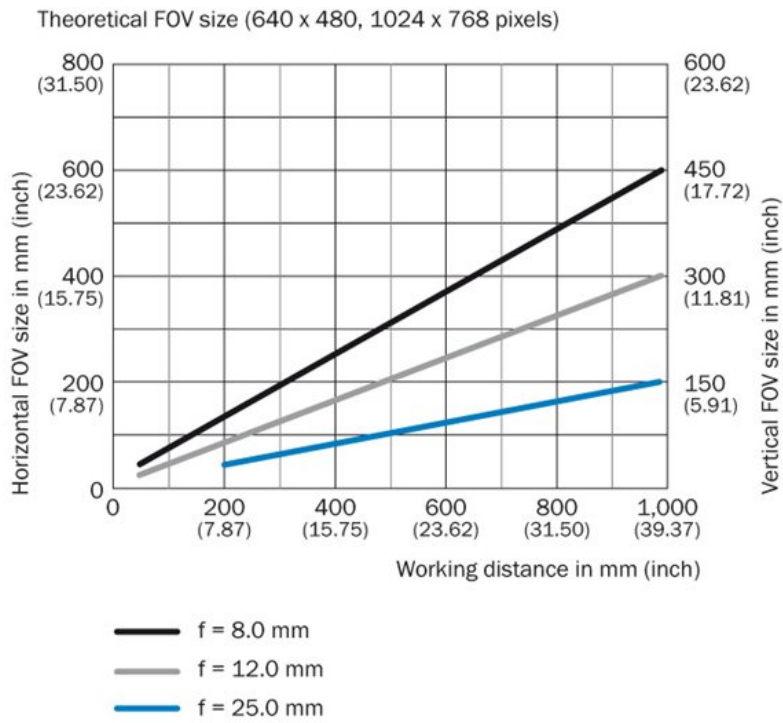


Connection diagram Power I/O

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## Field of view



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