

IVC-3D11112







Smart cameras IVC-3D, IVC-3D 200, RS-485 Fast Ethernet (10/100 Mbit/s): TCP/IP, UDP/IP, EtherNet/IP OPC server included, IVC-3D 200, plastic

windows

Model Name > IVC-3D11112 Part No. > 1042152



At a glance

- Easy 3D measurement provides information about object height, shape and volume
- · Independent of contrast and color
- · Easy-to-use graphical user interface for fast application development
- Simple connection of PLCs, robots, and other control systems, e.g., via EtherNet/IP or OPC
- Scans up to 5,000 profiles per second
- · Industrial, robust metal housing

Your benefits

- The IVC-3D makes advanced 3D shape inspections easy, enabling cost-efficient solutions
- Contrast-independent measurement provides greater reliability even at varying object color and when the object color is the same as the background
- · Factory calibrated instantly providing true metric dimensions at production speed
- The camera's OPC server and EtherNet/IP interface enables simple communication with PLCs, robots and control systems, making integration easy
- Stand-alone operation no PC is needed after configuration





Features

Task: Positioning Inspection

Reading Measuring

Technology: 3D, Image analysis, LineScan

Working distance: 306 mm ... 683 mm ¹/₂ Example field of view (H x W): 200 mm x 600 mm

Width at minimum working distance: 436 mm
Width at maximum working distance: 810 mm
Maximum height range: 377 mm

Light source: Visible red light, laser, 658 nm, ± 15 nm

Laser class: 2M (IEC 60825-1 : 2007-03)

Imaging angle: 58 $^{\circ}$ Offline support: Emulator

1) The specified values are valid for single device installations. Please see operating instructions for details.

Performance

Image sensor: **CMOS** 800 MHz Processor:

Memory: 128 MB RAM, 16 MB flash

Maximum performance: 5,000 3D profiles/s 3D profile resolution: 2,048 points Typical height resolution: 0.2 mm

Interfaces

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.

IVC Studio Configuration software:

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

3 B-type program controlled outputs Digital outputs:

Total output load < 100 mA

Trigger output

Encoder interface: RS-422 Maximum encoder frequency: 2 MHz

Mechanics/electronics

M12, 4-pin female connector, D-coded (Ethernet) M12, 8-pin female connector (RS-485) Connectors:

M12, 8-pin male connector (power I/O) M12, 5-pin male (Encoder)

Connector material: Nickel plated brass 24 V DC± 20 % Supply voltage:

< 1 A Without output load Power consumption:

Ripple: < 5 Vpp Enclosure rating: **IP 65** Protection class: II, III

Housing material: Anodized aluminum

Window material: **PMMA** Weight: 4 kg

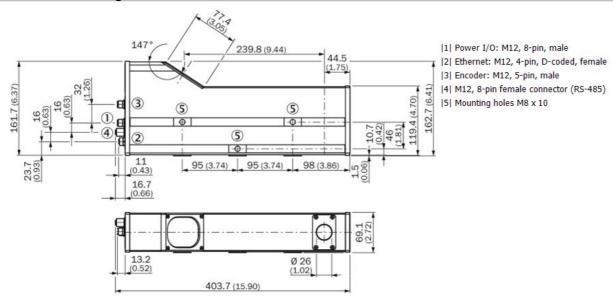
Dimensions (L x W x H): 387 mm x 69 mm x 163 mm

Optics: Fixed

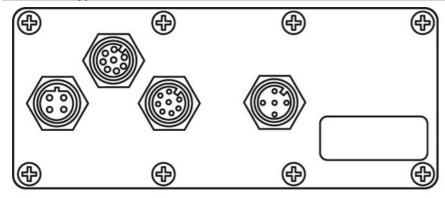
Ambient data

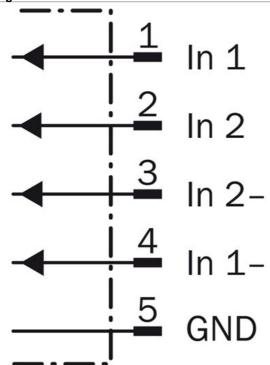
Shock load: 15 g, 3 x 6 directions Vibration load: 5 q, 58 Hz ... 150 Hz Ambient operating temperature: 0 °C ... 40 °C -20 °C ... 70 °C Ambient storage temperature:

Dimensional drawing

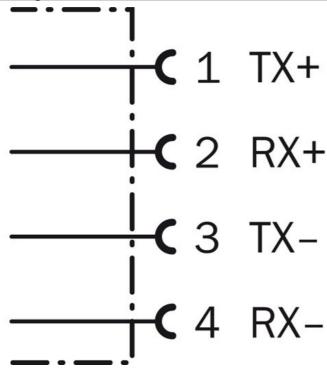


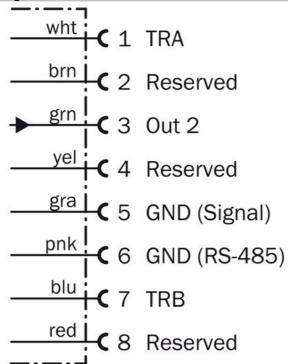
Connection type



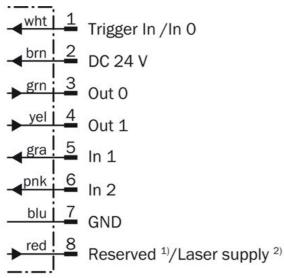


Connection diagram Ethernet





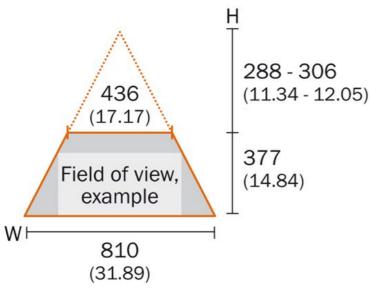
Connection diagram Power I/O



- Do not connect for IVC-3D products with a type code as IVC-3Dxxx1x.
- ²⁾ Only in IVC-3D products with a type code as IVC-3Dxxx2x.

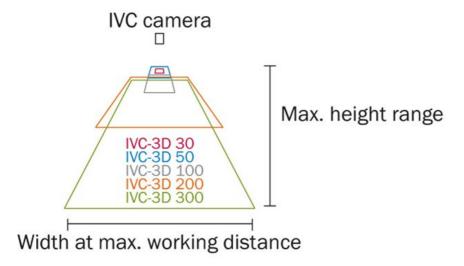
IVC-3D 200

Typ. field of view in mm (inch)



Field of view overview

Typical field of view



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