



# I2D601N-MCB71

midiCam

2D MACHINE VISION

**SICK**  
Sensor Intelligence.



### Ordering information

Type	Part no.
I2D601N-MCB71	6060401

Other models and accessories → [www.sick.com/midiCam](http://www.sick.com/midiCam)



### Detailed technical data

#### Features

<b>Task</b>	Presence inspection Quality inspection Measuring, 2D Positioning
<b>Technology</b>	2D snapshot
<b>Product category</b>	Streaming, flexible
<b>Sensor</b>	CMOS monochrome NIR
<b>Sensor used</b>	e2V EV76C661ABT
<b>Shutter technology</b>	Global-Shutter Rolling-Shutter Global-Start-Shutter
<b>Illumination</b>	To be ordered separately as accessories
<b>Further functions</b>	Line mode, Scaler, Sequenzer, log mode, Hot pixel correction on the sensor, Fine illumination grid, Multi area of interest, Binning
<b>Lens</b>	C-mount
Optical format	1/1.8"
Note	To be ordered separately as accessories

#### Mechanics/electronics

<b>Connection type</b>	M12, 8-pin male connector, A-coded (2 GPIOs, 1 digital input, 1 digital output)
<b>Supply voltage</b>	12 V ... 24 V <sup>1)</sup>
<b>Power consumption</b>	≤ 2.9 W
<b>Enclosure rating</b>	IP65 IP67 <sup>2)</sup>
<b>Weight</b>	175 g
<b>Dimensions (L x W x H)</b>	44.7 mm x 53 mm x 41 mm

<sup>1)</sup> Or PoE.

<sup>2)</sup> When using a optics protection hood and an M12 connection cap for the connection not in use.

#### Performance

<b>Bit depth</b>	12 bit
<b>Sensor resolution</b>	1,280 px x 1,024 px (1.31 Mpixel, 5:4, SXGA)
<b>Sensor size</b>	6.784 mm x 5.427 mm

<b>Scan/frame rate</b>	50 fps, in freerun mode 48 fps, in trigger mode
<b>Memory</b>	60 MB
<b>Exposure time</b>	0.009 ms ... 2,000 ms
<b>Pixel size</b>	5.3 µm

## Interfaces

<b>Ethernet</b>	✓, UDP/IP
Data transmission rate	1,000 Mbit/s
<b>Configuration software</b>	I2D Software Suite

## Ambient data

<b>Shock load</b>	80 g, EN 60068-2-27 (1995-03), EN 60068-2-29 (1995-03)
<b>Vibration load</b>	10 g, 30 Hz ... 500 Hz, EN 60068-2-6 (1996-05)
<b>Ambient operating temperature</b>	0 °C ... +40 °C <sup>1)</sup>
<b>Storage temperature</b>	-20 °C ... +60 °C <sup>1)</sup>

<sup>1)</sup> Relative humidity: 0% ... 100%.

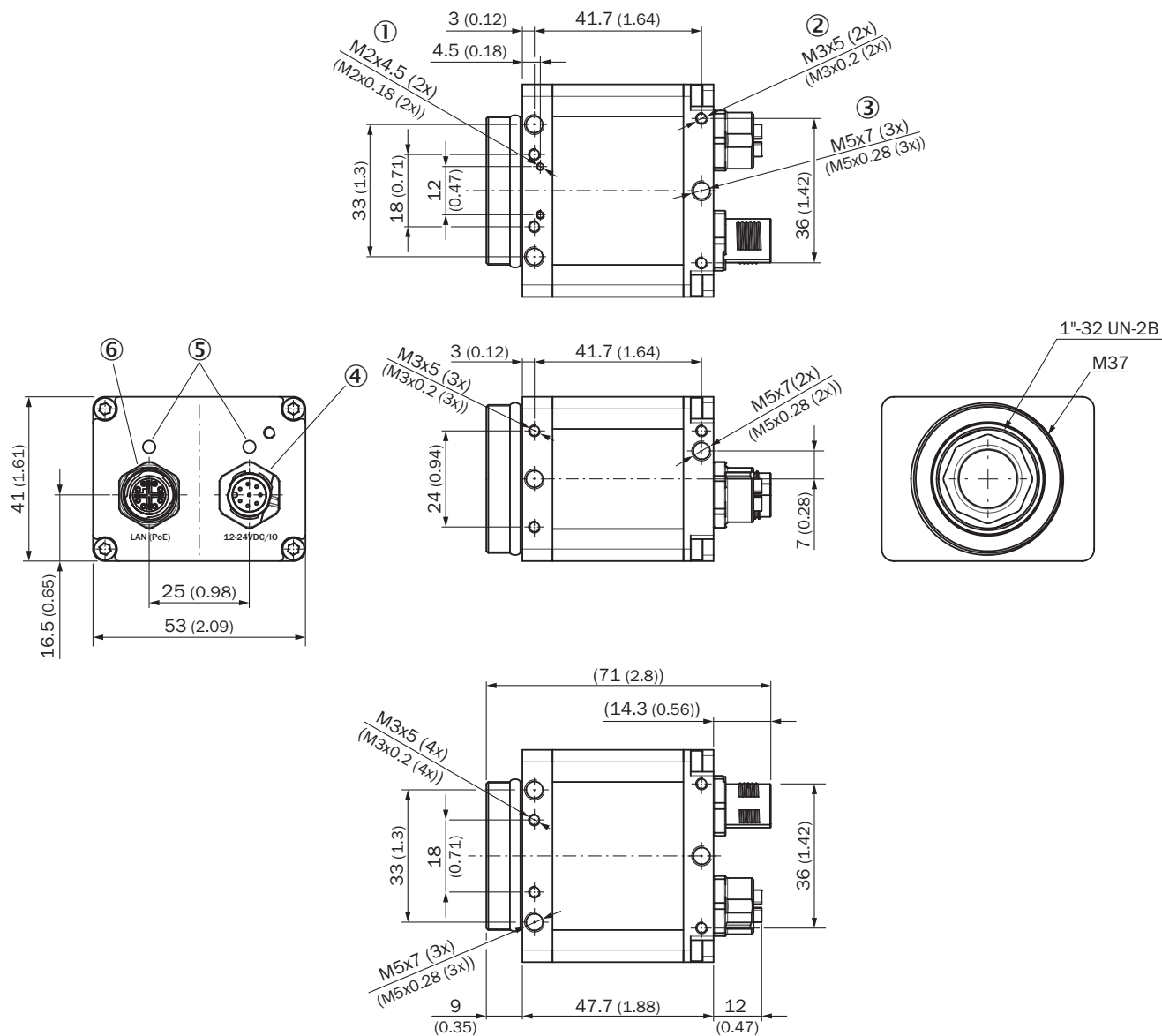
## General notes

<b>Note</b>	Not free of paint wetting impairment substances.
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## Classifications

<b>ECLASS 5.0</b>	27310205
<b>ECLASS 5.1.4</b>	27310205
<b>ECLASS 6.0</b>	27310205
<b>ECLASS 6.2</b>	27310205
<b>ECLASS 7.0</b>	27310205
<b>ECLASS 8.0</b>	27310205
<b>ECLASS 8.1</b>	27310205
<b>ECLASS 9.0</b>	27310205
<b>ECLASS 10.0</b>	27310205
<b>ECLASS 11.0</b>	27310205
<b>ECLASS 12.0</b>	27310205
<b>ETIM 5.0</b>	EC001820
<b>ETIM 6.0</b>	EC001820
<b>ETIM 7.0</b>	EC001820
<b>ETIM 8.0</b>	EC001820
<b>UNSPSC 16.0901</b>	43211731

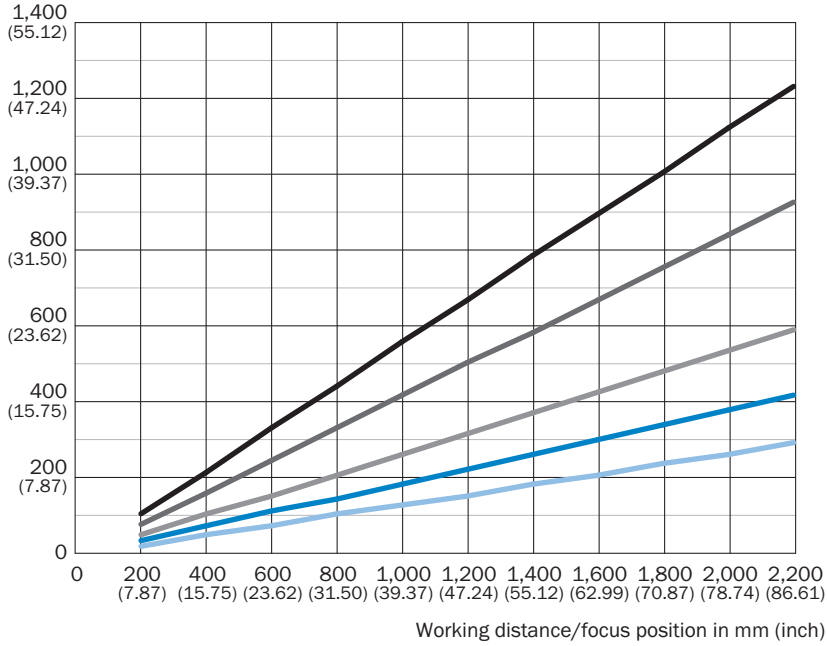
### Dimensional drawing (Dimensions in mm (inch))



- ① Blind hole thread M2, 4.5 mm deep (2 x)
- ② Blind hole thread M3, 5 mm deep (14 x), for mounting
- ③ M6 blind tapped holes, 7 mm deep (10 x), for mounting
- ④ I/O power connection, male connector, M12, 8-pin, A coded, Binder
- ⑤ LED for status display (2 x)
- ⑥ M12, 8-pin female connector, X-coded (Gigabit Ethernet)

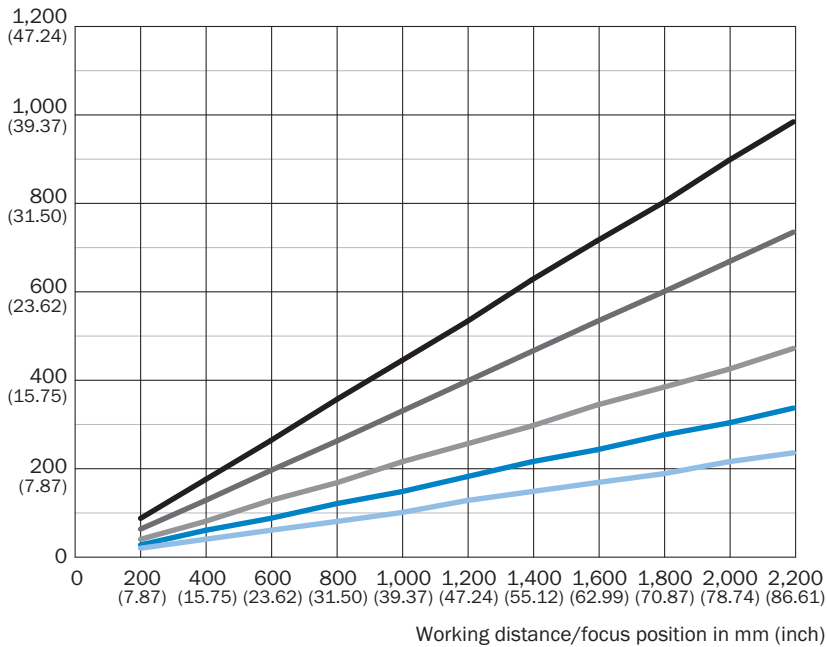
Field of view

Field of view x in mm (inch)



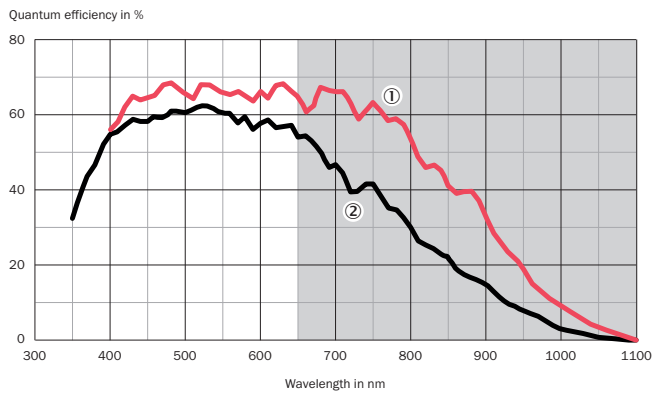
- f = 12 mm
- f = 16 mm
- f = 25 mm
- f = 35 mm
- f = 50 mm

Field of view y in mm (inch)



- f = 12 mm
- f = 16 mm
- f = 25 mm
- f = 35 mm
- f = 50 mm



### Spectral range



- ① NIR
- ② Monochrome

### Recommended accessories

Other models and accessories → [www.sick.com/midiCam](http://www.sick.com/midiCam)

	Brief description	Type	Part no.
<b>Plug connectors and cables</b>			
	<ul style="list-style-type: none"> <li><b>Connection type head A:</b> Male connector, M12, 8-pin, straight, X-coded</li> <li><b>Connection type head B:</b> Male connector, RJ45, 8-pin, straight</li> <li><b>Signal type:</b> Ethernet, Gigabit Ethernet</li> <li><b>Cable:</b> 2 m, 8-wire, PUR, halogen-free</li> <li><b>Description:</b> Ethernet, Gigabit Ethernet, shielded</li> <li><b>Application:</b> Zones with oils and lubricants</li> </ul>	YM2X18-020EG1MRJA8	2106258
<b>Others</b>			
	<ul style="list-style-type: none"> <li><b>Connection type head A:</b> Female connector, M12, 8-pin, straight, A-coded</li> <li><b>Connection type head B:</b> Flying leads</li> <li><b>Signal type:</b> Sensor/actuator cable</li> <li><b>Cable:</b> 2 m, 8-wire, PVC</li> <li><b>Description:</b> Sensor/actuator cable, shielded</li> <li><b>Application:</b> Zones with chemicals</li> </ul>	YF2A28-020VA6XLEAX	2096243

### Recommended services

Additional services → [www.sick.com/midiCam](http://www.sick.com/midiCam)

	Type	Part no.
<b>Extended warranty</b>		
<ul style="list-style-type: none"> <li><b>Product area:</b> Identification solutions, machine vision, Detection and ranging solutions, safety camera sensors, Safety laser scanners, Safety radar sensors</li> <li><b>Range of services:</b> The services correspond to the scope of the statutory manufacturer warranty (SICK general terms of delivery).</li> <li><b>Duration:</b> Five-year warranty from delivery date.</li> </ul>	Extended warranty for a total of five years from delivery date	1680671

## SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is “Sensor Intelligence.”

## WORLDWIDE PRESENCE:

Contacts and other locations –[www.sick.com](http://www.sick.com)