


# cm1

Camera for Symphony MX modules



	Suitable for outdoor use	Easy integration
Modular solution	Impact-proof IK07	Full HD, 1080p

## Powerful camera for outdoor areas

This high-end camera module is made from high-quality materials such as glass and anodised aluminium. Thanks to its timeless and inconspicuous design, it is suitable for modern custom solutions.

The powerful camera module is connected to the Intercom module im3 or im6. An HS-Link cable from Commend with a length of up to 3 m (118 in) can be used for this purpose. The cm1 can be installed e.g. in Intercom stations specially designed to customer requirements, columns and automatic pay stations as well as smart city solutions.

With WDR ("Wide Dynamic Range"), the camera provides a clear and high-quality video image even in difficult lighting conditions, for example, overexposed or too dark areas.

## Features and highlights

- Built-in camera video processor
- Suitable for indoor and outdoor areas
- High protection against vandalism (mechanical impact resistance IK07)
- 3 mm (0.12 in) thick and hardened front glass
- Durable to wind and weather thanks to high-quality components and protection class IP66 (at the front when installed)
- Ultra-wide field of view video camera
- Lens distortion correction
- Well-thought-out housing concept for an easy and safe mounting
- Wide Dynamic Range (WDR)

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## Technical specifications



### Technical data

<b>IP rating:</b>	IP66 (acc. to EN 60529) <sup>1)</sup>
<b>Mechanical impact resistance:</b>	IK07 (acc. to EN 62262) <sup>1)</sup>
<b>Front panel:</b>	hardened glass, 3 mm (0.12 in) hole diameter: 37 mm/1.46 in (± 0.1 mm/0.04 in)
<b>Image sensor:</b>	1/2.5 in RGB CMOS
<b>Lens:</b>	F2.4, fixed aperture, 150° diagonal angle, 145° horizontal angle, 123° vertical angle
<b>Minimum illumination:</b>	colour: 1.0 lux
<b>Resolution (W x H):</b>	max. 1920 x 1080 pixels <sup>2)</sup>
<b>Frame rate:</b>	up to 30 fps
<b>Video features:</b>	codecs: H.264 (SIP video and ONVIF), MJPEG (HTTP video and ONVIF) and RTSP ONVIF specification: ONVIF Profile S
<b>Operating temperature range:</b>	−40 °C to +70 °C (−40 °F to +158 °F) <sup>3)</sup>
<b>Storage temperature range:</b>	−40 °C to +70 °C (−40 °F to +158 °F)
<b>Relative humidity:</b>	up to 95%, not condensing
<b>Connection:</b>	HS-Link <sup>4)</sup>
<b>Power supply:</b>	5 VDC via HS-Link cable
<b>Approvals and compliances:</b>	EN 61000-6-2, EN 61000-6-4, EN 55032 Class B, EN 55024, EN 55035, EN 62368-1 FCC Part 15 Class B, ICES-003 Class B IEC/EN/UL 62368-1, CB-Scheme (by UL), UL Listed (E351589)
<b>Dimensions (ø x D):</b>	with mounting ring: 62 x 25 mm (2.44 x 0.98 in) without mounting ring: 42 x 25 mm (1.65 x 0.98 in)
<b>Weight incl. package:</b>	approx. 160 g (0.35 lbs)
<b>Accessories:</b>	ASKHSLINK-03 (30 cm (12 in) cable) ASKHSLINK-05 (50 cm (20 in) cable) ASKHSLINK-10 (100 cm (40 in) cable) ASKHSLINK-30 (300 cm (118 in) cable)

<sup>1)</sup> At the front when installed (tested with stainless-steel front).

<sup>2)</sup> The maximum resolution depends on the Intercom module (see respective data sheet).

<sup>3)</sup> Applies only to cm1 Rev. AB or higher.

<sup>4)</sup> The HS-Link connection is intended only for use with compatible Commend devices (see "System requirements").

### Extent of supply

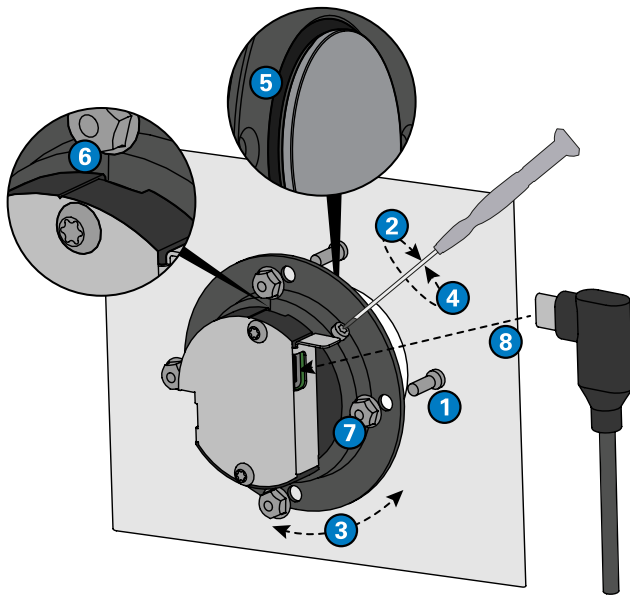
- Camera module
- Mounting ring
- Gasket
- HS-Link cable (30 cm/12 in)
- 4 x M3 screw nuts
- Short reference

### System requirements

- im3 or
- im6



## Mounting



### ATTENTION

The alignment of the camera module affects the camera image. For a horizontal camera image, follow the instructions in ③ and ⑥.

- ① Make sure that the four M3 threaded bolts are positioned correctly.
- ② (Only for a front thickness less than 3 mm/0.12 in) Slightly loosen the locking screw (hexagon, H2). Make sure that it does not fall out.
- ③ (Only for a front thickness less than 3 mm/0.12 in) Adjust the mounting ring to the front thickness by turning it until the camera glass is flush with the front. The notch on the top of the cm1 and the notch on the mounting ring have to be aligned for a horizontal video image.
- ④ (Only for a front thickness less than 3 mm/0.12 in) Tighten the locking screw (max. 1 Nm).
- ⑤ Make sure that the gasket is located in the designated notch.
- ⑥ Put the cm1 on the M3 threaded bolts. Make sure that the camera module is positioned correctly (notch points upwards and HS-Link connector points to the right).
- ⑦ Use the M3 screw nuts included in the extent of supply to fix the cm1 to the M3 threaded bolts (max. 1 Nm).
- ⑧ Connect the HS-Link cable to the Intercom module. Make sure that the cable points downwards.

## Quality tested. Reliable. Smart.

COMMEND products are developed and manufactured by Commend International in Salzburg, Austria.

The development and manufacturing processes are certified in accordance with **EN ISO 9001:2015**.



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