Device description

External camera for wall and ceiling mounting with wide-range lens, integrated IR lighting and automatic white balance. The external camera can be installed anywhere in the entrance area and can be integrated into the Gira door communication system via the DCS-camera-gateway. The integrated temperature-dependent camera heating prevents condensation from forming on the camera cover due to changing climactic conditions and thus provides a clear view.

An overview of the most important functions:
- Light-sensitive chip set for clear imaging in weak light conditions
- Settable IR LEDs for video monitoring in complete darkness
- Easy-plug camera module and mounting plate for simple, rapid installation
- Second video output for connecting a monitor during start-up
- Camera module adjustable in 3 axes
- IP 66 protection type for outdoor use
Installation

**ESD warning**

Important: Electrostatic charging! Before opening the housing and working on cabling please discharge by contacting with earthed metal parts to avoid damage to the device.

**Cable feed**

Cable feed can be either surface-mounted or flush-mounted. The accompanying cable gland with strain relief must be used to ensure IP 66 protection. If cable feed is flush-mounted then installation should be via a flush-mounted wall box to ensure sufficient space for screw fastening. The second opening is closed with the pre-installed cover on the underside.

**Preparing installation**

The white design ring and dome must be removed before installation.

1. Loosen and remove the white design ring by turning counterclockwise.
2. Loosen the three attachment screws of the dome and remove the dome.

The camera module may also be removed to prevent damage to the sensitive optic when mounting the base plate.

3. Loosen both screws of the camera module (1) and carefully pull the camera module upwards.
Mounting base plate
1. Position the accompanying hole template at the intended installation location and mark the drilling holes.
2. Drill the mounting holes and fasten the base plate with the accompanying screws and plugs.

Inserting camera module
1. Position the camera module and base plate so that the 15-pole plug and 15-pole pin jack face each other.
2. When the plug and pin jack are one above the other, press the camera module on both sides towards the base plate until the plug has completely engaged into the pin jack.
3. Tighten both screws of the camera module.
Mounting dome

Before mounting the dome, carry out connection and start-up of the camera.

Mounting the dome:
1. Pay attention to proper seating of the seal when mounting the dome.
2. Fasten the dome to the base plate with 3 screws.
3. Attach the white design ring and engage by turning clockwise.

Connection

1. Connect the 12 VDC power supply either via the circular connector or via the accompanying terminal adapter. If using the terminal adapter, comply with polarity specified.

Permanent power supply

To ensure camera heating functionality, the camera must be permanently connected to the power supply.

2. The video signal is output via the BNC pin jack of the video output.
**Start-up**

During start-up, a monitor can be connected to the secondary video output for checking the camera image.

**Aligning lens**

The camera lens can be adjusted in 3 axes. Module rotation (1st and 3rd axis) must not exceed 360°.

- **Swivelling** (1st axis)
- **Tilting** (2nd axis)
- **Rotating** (3rd axis)
Setting focus and zoom
The zoom factor and focus each have a setting screw on the underside of the lens. These screws also function as fixing screws for the lens.

Setting zoom and focus:
1. Loosen the setting screws.
2. Carry out settings for zoom and focus according to requirements.
3. Secure the setting screws.

Zoom factor setting:
- W (WIDE) – wide angle of vision, zoom 0x (max.)
- T (TELE) – narrow angle of vision, zoom 3.75x (max.)

Focus setting:
- F (FAR) – far focus
- N (NEAR) – near focus
Setting camera parameters

The following setting options are available on the device PCB:

**Iris level potentiometer (1)**
For setting the basis aperture of the auto iris lens

**Slider switch for IR range (2)**
The range of the IR light can be set in 3 steps
(HI: 20 metres; MID: 10 metres; LOW: 5 metres).

**DIP switch (3)**
- BLC – Background lighting compensation
  (BLC=on; OFF=off)
- AGC – Automatic gain control
  (AGC=normal; HI=AGC+6dB)
- DAY – Day/night switching
  (AUTO=B/W mode at night;
   DAY=colour mode also at night)
- IR – Infrared LED activation
  (AUTO=automatic activation of IR LED in weak
   light conditions;
   IR OFF=IR LEDs permanently deactivated)
# Technical data

<table>
<thead>
<tr>
<th>Specification</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Power supply:</td>
<td>12 V DC</td>
</tr>
<tr>
<td>Current consumption:</td>
<td>max. 120 mA (IR off), max. 310 mA (IR on)</td>
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<tr>
<td>Protection type:</td>
<td>IP 66</td>
</tr>
<tr>
<td>Operating temperature:</td>
<td>-20 °C to +50 °C</td>
</tr>
<tr>
<td>Humidity:</td>
<td>0 to 85%, non-condensing</td>
</tr>
<tr>
<td>Dimensions (HxØ):</td>
<td>99.5 x 145 mm</td>
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<td>Standard:</td>
<td>PAL</td>
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<td>TV lines:</td>
<td>550 TVL</td>
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<td>Image sensor:</td>
<td>1/3&quot; Sharp HQ CCD</td>
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<tr>
<td>Pixels (effective):</td>
<td>752 (V) x 582 (H)</td>
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<tr>
<td>Signal-noise ratio:</td>
<td>48 dB</td>
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<tr>
<td>Minimal lighting (day):</td>
<td>0.03 lux @ F2.0</td>
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<tr>
<td>Minimal lighting (night):</td>
<td>0 lux @ F2.0</td>
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<td>Day/night:</td>
<td>IR swivel filter (ICR), colour / B/W</td>
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<tr>
<td>Lens:</td>
<td>2.8-10.5 mm, F2.0</td>
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<td>IR LED:</td>
<td>24 LEDs, 850 nm</td>
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<tr>
<td>IR range:</td>
<td>5 / 10 / 20 m</td>
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<tr>
<td>Horizontal angle of vision:</td>
<td>27.4° to 101.8°</td>
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<td>Electronic shutter:</td>
<td>AI</td>
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<td>Gain control (AGC):</td>
<td>20 dB / 26 dB (HI)</td>
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<td>Background lighting</td>
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<td>compensation:</td>
<td>BLC</td>
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<td>White balance:</td>
<td>AWB, 2700 K to 9500 K</td>
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<td>Video signal:</td>
<td>2 x FBAS, 1 Vss, 75 ohms (BNC, cinch)</td>
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<td>Camera heating</td>
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<td>Current consumption:</td>
<td>1 A</td>
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<tr>
<td>Switch-on current:</td>
<td>max. 1.5 A</td>
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<tr>
<td>Switch-on temperature:</td>
<td>&lt; 8 °C</td>
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<tr>
<td>Switch-off temperature:</td>
<td>&gt;14 °C</td>
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</tbody>
</table>
Warranty

We provide a warranty in accordance with the statutory requirements. Please send the device postage paid with error description via the specialist trade to our central customer service centre.

Gira
Giersiepen GmbH & Co. KG
Service Center
Dahlienstraße 12
42477 Radevormwald