

Code: IPC-HFW5449T1-ASE-D2-0360B

# IP CAMERA **IPC-HFW5449T1-ASE-D2-0360B** Full-Color Dual-Lens - 4 Mpx 3.6 mm DAHUA

Net: **825.43 EUR** Gross: **825.43 EUR**

The **DAHUA Dual-Lens** Network Camera is a modern camera combining 3 innovative technologies: **Dual Light Fusion** - image processing based on 2 sensors and 2 lenses, **Dahua Full-Color** - 24/7 color image, **WizMind** - Artificial Intelligence functions. The camera also has 2 hybrid LED illuminators equipped with IR and white light LEDs.

The **Dual Light Fusion** technology allows the camera to collect visible color details of the image and lightness information using for this purpose separate lenses. One camera sensor processes the image in the visible light range and the other in the infrared range. Thanks to the pixel-level frame-to-frame mapping, the captured images are clear, high-definition and with vivid colors, even when the supplementary white light is off. Such image processing can significantly reduce light pollution in the monitored scene at night.

By utilizing the high precision AA - Active Alignment process, the lenses and sensors of these cameras are precisely aligned, which enables that the captured image is clearly and accurately restored. The large aperture of the lens F1.0 increases the amount of light hitting the sensor. The large size of the sensor 1/1.8" provides increase in the brightness of the image. As a result, the camera achieves a S/N ratio 14 times higher compared to conventional models.

IP camera with efficient H.264 / H.265 image compression algorithm for clear and smooth video streaming at maximal resolution of 4 MPx. The camera has extensive functions of intelligent image analysis. PoE powering possibility, compatible with the 802.3af/ePoE standard makes the device more universal and easier to install.



## SPECIFICATION

|                                    |                                                                                                                                                   |
|------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| Standard:                          | TCP/IP                                                                                                                                            |
| Sensor:                            | 2 x 1/1.8 " Progressive Scan CMOS                                                                                                                 |
| Matrix size:                       | 4 Mpx                                                                                                                                             |
| Resolution:                        | 2688 x 1520 - 4 Mpx ,<br>2560 x 1440 - 3.7 Mpx ,<br>2304 x 1296 - 3 Mpx ,<br>1920 x 1080 - 1080p ,<br>1280 x 960 - 1.3 Mpx ,<br>1280 x 720 - 720p |
| Scanning system:                   | Progressive                                                                                                                                       |
| Lens:                              | 2 x 3.6 mm / F1.0                                                                                                                                 |
| View angle:                        | • 75 ° (manufacturer data)<br>• 91 ° (our tests result)                                                                                           |
| Range of IR illumination:          | ≤ 50 m                                                                                                                                            |
| White light LED illuminator range: | ≤ 50 m                                                                                                                                            |
| Min. illumination:                 | 0.0002 Lux / F1.0 (color)                                                                                                                         |
| RS-485 interface:                  | —                                                                                                                                                 |
| Memory card slot:                  | Micro SD memory cards up to 256GB support (possible local recording)                                                                              |

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|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Image compression method:      | H.265+ / H.265 / H.264+ / H.264 / H.264B / MJPEG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Alarm inputs / outputs:        | 1 / 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Audio:                         | <ul style="list-style-type: none"> <li>• Audio input,</li> <li>• Microphone built-in,</li> <li>• Audio output,</li> <li>• Speaker built-in,</li> <li>• Bi-directional audio streaming support,</li> <li>• Audio detection</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Main stream frame rate:        | 25 fps @ 4 Mpx                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Network interface:             | 10/100 Base-T (RJ-45)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Network protocols:             | IPv4/IPv6, HTTP, TCP, UDP, ARP, RTP, RTSP, SMTP, FTP, DHCP, DNS, NTP, Multicast, DDNS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| WEB Server:                    | Built-in                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Max. number of on-line users:  | 20                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| ONVIF:                         | 20.12                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Mobile phones support:         | Port no.: 37777 or access by a cloud (P2P) <ul style="list-style-type: none"> <li>• Android: Free application <a href="#">DMSS</a></li> <li>• iOS (iPhone): Free application <a href="#">DMSS</a></li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Default IP address:            | 192.168.1.108                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Default admin user / password: | admin / -<br>The administrator password should be set at the first start                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Web browser access ports:      | 80, 37777                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| PC client access ports:        | 37777                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Mobile client access ports:    | 37777                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Port ONVIF:                    | 80                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| RTSP URL:                      | rtsp://admin:hasło@192.168.1.108:554/cam/realmonitor?channel=1&subtype=0 - Main stream<br>rtsp://admin:hasło@192.168.1.108:554/cam/realmonitor?channel=1&subtype=1 - Sub stream                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Main features:                 | <ul style="list-style-type: none"> <li>• Dual AI image sensors with multi-spectral imaging technology that produces colorful images in low illumination conditions</li> <li>• Dahua Multi-Spectrum Fusion technology extracts the details and brightness of the visible spectrum and infrared spectrum to create a single image with a brightness close to the visible light brightness, so the camera provides a better image in low light</li> <li>• D-WDR - Wide Dynamic Range</li> <li>• 3D-DNR - Digital Noise Reduction</li> <li>• ROI - improve the quality of selected parts of image</li> <li>• NAS - Network Attached Storage support</li> <li>• BLC/HLC - Back Light / High Light Compensation</li> <li>• Day/Night mode (color/b&amp;w/auto)</li> <li>• Full Color - colorful night mode</li> <li>• Auto White Balance</li> <li>• AGC - Automatic Gain Control</li> <li>• Motion Detection</li> <li>• Configurable Privacy Zones</li> <li>• Mirror - Mirror image</li> <li>• Built-in hybrid illuminator (LED - IR/white)</li> <li>• SMD 3.0 - searching for an object classified as: human, motor vehicle</li> <li>• Heat map - the selection in the image by corresponding colors the areas with different traffic</li> <li>• IVS analysis : crossing the line (tripwire), intrusion, fast moving - classification of people and vehicles, parking detection, scene changing, abandoned/missing object, detection of people gathering, loitering detection, counting people entering and leaving the area, counting people or the time of their stay with the option of setting an alarm, people counting - Supports area or queue management and the ability to configure up to 4 rules, face detection - supports 6 types of facial attributes extraction, supports 8 types of face expressions</li> </ul> |
| Housing:                       | Compact - Metal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Color:                         | White + Black                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |



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|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| "Index of Protection": | IP67                                                                                                                                      |
| Vandal-proof:          | —                                                                                                                                         |
| Power supply:          | <ul style="list-style-type: none"> <li>• PoE (802.3af),</li> <li>• ePoE,</li> <li>• 12 V DC / 875 mA</li> </ul>                           |
| Power consumption:     | <ul style="list-style-type: none"> <li>• ≤ 9.8 W @ PoE</li> <li>• ≤ 9.9 W @ 12 V</li> </ul>                                               |
| Operation temp:        | -40 °C ... 60 °C                                                                                                                          |
| Weight:                | 1.07 kg                                                                                                                                   |
| Dimensions:            | 288 x 94 x 85 mm                                                                                                                          |
| Supported languages:   | Polish, English, Czech, French, Spanish, Dutch, German, Russian, Portuguese, Romanian, Turkish, Ukrainian, Hungarian, Vietnamese, Italian |
| Manufacturer / Brand:  | DAHUA                                                                                                                                     |
| Guarantee:             | <b>3 years</b>                                                                                                                            |

## PRESENTATION



Side view:



Bottom view:



Memory card slot:



Camera mounting side view:



Camera connectors:



Connectors description:



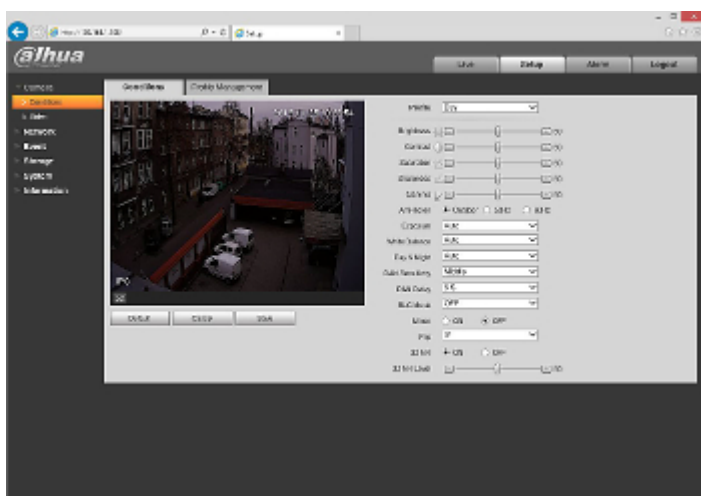
See how to initialize DAHUA cameras:

:

In the kit:



Example captures of device interface:



## OUR TESTS

Camera image at artificial illumination (about 30Lux):



Camera image at night conditions with internal built-in LED illuminator on:



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Camera image at night conditions with internal built-in IR illuminator on:



Camera image at direct strong light opposite to camera:



#### PACKAGE

|                                  |                    |
|----------------------------------|--------------------|
| Dimensions (L x W x H): 0x0x0 mm | Gross Weight: 0 kg |
|----------------------------------|--------------------|