

# Warning!

Please read the user manual included in this work as it contains important information related with safety of installation and use of the device.

Only persons who read the user manual may use the device.

The user manual must be kept because it may be required in the future. The device is to be used exclusively for purposes specified in this user manual.

The device must be unpacked prior to starting-up. After removing the packaging make sure the device is in working order. If the product has defects, it should not be used until it is repaired.

The product is intended for use at home and commercial use and may not be used for other than intended use.

The manufacturer is not liable for damages resulting from not adhering to the rules contained in the user manual, therefore, we recommend to follow the aforementioned safety rules for operation and maintenance of the device. In this way you will ensure yourself safety and avoid causing damage to the device.

The manufacturer and the supplier are not liable for losses or damages arising out of the product, including financial or intangible losses, loss of profits, income, data, pleasure from use of the product or other products related with it - indirect, incidental or consequential loss or damage. The above provisions apply whether the loss or damage concerns:

1. Deterioration of quality or the lack of operation of the products or products related with it due to damage as well as the lack of access to the product when it is undergoing repair, which results in stoppage the loss of user's time or a break in business activity; 2. Improper results of operation of the product or products related with it;

3. It applies to losses and damages according to any legal category, including negligence and other losses, termination of a contract, expressed or implied guarantee and strict liability (even if the manufacturer or the supplier was notified about the possibility of occurrence of such damages).

#### Safety measures:

Particular attention at designing was directed to quality standards of the device where ensuring safety of operation is the most important factor.

The device must be secured against contact with caustic, staining and viscous fluids.

The device was designed in such a way that it restarts operation when power supply is restored after a break.

Attention! We recommend using protections to further protect the device from possible overvoltages in installations. Surge protectors are effective protection against accidental pass to the device voltages higher than the rated. Damages caused by pass the voltages higher than specified in manual, are not under warranty.

Turn off the device before transporting it.

Prior to connecting the device to a power source check whether the supplied voltage is consistent with rated voltage specified in the user manual.

#### Proper product disposal:

A marking of a crossed out waste bin indicates that the product may not be disposed together with other household waste in the entire EU. To avoid possible damage to the natural environment of health due to uncontrolled waste disposal, therefore, it should be handed over for recycling, propagating in this way sustainable use of natural resources.

To return a worn-out product, use a collection and disposal system of this type of equipment or contact a seller from whom it was purchased. He will then be recycled in an environmentally-friendly way.





IP camera with efficient H.264 / H.265 image compression algorithm for clear and smooth video streaming at maximal resolution of 5 MPx.

PoE powering possibility, compatible with the 802.3af standard makes the device more universal and easier to install.

Camera is according to IP67 Index of Protection norm. Powered by Darkfighter - the camera has very good sensitivity, dedicated to poor lighting conditions.

| Standard:                 | TCP/IP  |
|---------------------------|---|
| Sensor:                   | 1/3 " Progressive Scan CMOS   |
| Scanning system:          | Progressive   |
| Matrix size:              | 5 Mpx   |
| Resolution:               | 2592 x 1944 - 5 Mpx ,<br>2688 x 1520 - 4 Mpx ,<br>2304 x 1296 - 3 Mpx ,<br>1920 x 1080 - 1080p ,<br>1280 x 720 - 720p |
| Lens:                     | 2.8 mm  |
| View angle:               | <ul> <li>103 ° (manufacturer data)</li> <li>94 ° (our tests result)</li> </ul>  |
| Compression:              | H.265+ / H.265 / H.264+ / H.264 / MJPEG   |
| Range of IR illumination: | 40 m  |
| Alarm inputs / outputs:   | -   |
| Audio:                    | -   |
| Memory card slot:         | Micro SD memory cards up to 256GB support (possible local recording)  |
| Main stream frame rate:   | 20 fps @ 5 Mpx<br>25 fps @ 4 Mpx  |
| Network interface:        | 10/100 Base-T (RJ-45)   |



DELTA-OPTI Monika Matysiak; https://www.delta.poznan.pl POL; 60-713 Poznań; Graniczna 10 e-mail: delta-opti@delta.poznan.pl; tel: +(48) 61 864 69 60



| Network protocols:             | TCP/IP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, DDNS, RTP, RTSP, NTP, UPnP, SMTP, IGMP, IEEE 802.1x, QoS, IPv4, IPv6, UDP, Bonjour, SSL, TLS, PPPoE, SNMP, ARP   |
|--------------------------------|---|
| WEB Server:                    | Built-in  |
| Max. number of on-line users:  | 6   |
| ONVIF:                         | 18.12   |
| Mobile phones support:         | <ul> <li>Port no.: 8000 or access by a cloud (P2P)</li> <li>Android: Free application <u>iVMS-4500</u> or <u>Hik-Connect</u></li> <li>iOS (iPhone): Free application <u>iVMS-4500</u> or <u>Hik-Connect</u></li> </ul>  |
| Default IP address:            | 192.168.1.64  |
| Default admin user / password: | admin / -<br>The administrator password should be set at the first start  |
| Web browser access ports:      | 80  |
| PC client access ports:        | Port no.: 8000 or access by a cloud (P2P) - iVMS-4200 application   |
| Mobile client access ports:    | 8000  |
| Port ONVIF:                    | 80  |
| RTSP URL:                      | Main stream : rtsp://user:password@192.168.1.64:554/Streaming/Channels/101/     Sub stream : rtsp://user:password@192.168.1.64:554/Streaming/Channels/102/  |
| RS-485 interface:              | -   |
| Main features:                 | <ul> <li>WDR - 120 dB - Wide Dynamic Range</li> <li>3D-DNR - Digital Noise Reduction</li> <li>BLC/HLC - Back Light / High Light Compensation</li> <li>ROI - improve the quality of selected parts of image</li> <li>ANR - Automatic Network Replenishment allows to save image to the card when the network connection with DVR is break (network failure) and next synchronize its</li> <li>EXIR - high-efficiency infrared LEDs technology, which evenly covers the whole plan of both central vantage points of the scene as well as the corners</li> <li>Anti-Flicker - The technology eliminates the tiring eyes flickering image effect</li> <li>Day/night mode</li> <li>ICR - Movable InfraRed filter</li> <li>WB - White Balance</li> <li>AGC - Automatic Gain Control</li> <li>Possibility to change the resolution, quality and bit rate</li> <li>Sharpness - sharper image outlines</li> <li>Configurable Privacy Zones</li> <li>Motion Detection</li> <li>Mirror - Mirror image</li> <li>Filtering of false alarms based on the recognition of persons and vehicles</li> <li>Intelligent image analysis : crossing the line (tripwire), intrusion, detection of entry into the area / exit from the area, scene changing, face detection, advanced face capture features</li> </ul> |
| Power supply:                  | • PoE (802.3af),<br>• 12 V DC / 500 mA  |
| Power consumption:             | • $\leq$ 7 W @ PoE (802.3af)<br>• $\leq$ 6 W @ 12 V DC  |
| Housing:                       | Compact, Metal  |
| Color:                         | White   |
| "Index of Protection":         | IP67  |



DELTA-OPTI Monika Matysiak; https://www.delta.poznan.pl POL; 60-713 Poznań; Graniczna 10 e-mail: delta-opti@delta.poznan.pl; tel: +(48) 61 864 69 60



| Operation temp:       | -30 °C 60 °C   |
|-----------------------|--|
| Supported languages:  | Polish, English, Bulgarian, Croatian, Czech, Danish, Estonian, Finnish, French, Greek,<br>Spanish, Dutch, Lithuanian, Latvian, German, Norwegian, Portuguese, Russian,<br>Romanian, Serbian, Slovak, Slovenian, Swedish, Turkish, Ukrainian, Hungarian,<br>Vietnamese, Italian |
| Weight:               | 0.48 kg  |
| Dimensions:           | Ø 70 x 162 mm  |
| Manufacturer / Brand: | Hikvision  |
| SAP Code:             | 311312251  |
| Guarantee:            | 3 years  |



Side view:



Memory card slot:



DELTA-OPTI Monika Matysiak; https://www.delta.poznan.pl POL; 60-713 Poznań; Graniczna 10 e-mail: delta-opti@delta.poznan.pl; tel: +(48) 61 864 69 60

2024-06-26

DS-2CD2046G2-I(2.8mm)





Camera mounting side view:



Grounding:



DELTA-OPTI Monika Matysiak; https://www.delta.poznan.pl POL; 60-713 Poznań; Graniczna 10 e-mail: delta-opti@delta.poznan.pl; tel: +(48) 61 864 69 60





#### In the kit:



PACKAGE

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

