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.265 image compression algorithm for clear and smooth video streaming at maximal resolution of 4000 x 3000 (12.0 MPx). Due to above it is perfect solution for surveillance systems requiring persons or vehicles recognition. The used motozoom lens with 4.1 ... 16.4 mm focal length allows to remote view angle adjustment.

IVS analysis - crossing the line (tripwire), intrusion, scene changing, abandoned/missing object, face detection, people counting.

PoE powering possibility, compatible with the 802.3at standard makes the device more universal and easier to install. The device is equipped with ePoE technology which enables transmission up to 800 m at a speed of 10 Mb/s or 300 m at a speed of 100 Mb/s via cat. 5e twisted-pair.

Standard:	TCP/IP
Sensor:	1/1.7 " Progressive Scan CMOS
Matrix size:	12.0 Mpx
Resolution:	4000 x 3000 - 12.0 Mpx , 4096 x 2160 - 8.8 Mpx , 3840 x 2160 - 8.0 Mpx , 3072 x 2048 - 6.3 Mpx , 2560 x 1920 - 5.0 Mpx , 2048 x 1536 - 3.1 Mpx , 2304 x 1296 - 3.0 Mpx , 1920 x 1080 - 1080p , 1280 x 1024 - 1.4 Mpx , 1280 x 960 - 1.3 Mpx , 1280 x 720 - 720p
Lens:	4.1 ... 16.4 mm - Motozoom
View angle:	• 105 ° ... 35 ° (manufacturer data) • 100 ° ... 33 ° (our tests result)
Compression:	H.265 / H.264 / MJPEG
S/N ratio:	> 50 dB (AGC off)
Range of IR illumination:	50 m
Alarm inputs / outputs:	2 / 1
Bitrate:	14 kbps ... 9984 kbps - H.265 32 kbps ... 16384 kbps - H.264
Main stream frame rate:	20 fps @ 12.0 Mpx 25 fps @ 3840 x 2160 px
Network interface:	10/100 Base-T (RJ-45)

User Manual

Code: IPC-HFW81230E-ZEH
IP VANDALPROOF CAMERA **IPC-HFW81230E-ZEH** - 12.0 Mpx 4.1 ... 16.4 mm - MOTOZOOM DAHUA

Default admin user / password:	admin / admin
Network protocols:	HTTP, HTTPS, IPv4/IPv6, TCP, RTSP, RTP, UDP, SMTP, FTP, DHCP, DNS, DDNS, PPPoE, UPnP, NTP, QoS, Bonjour, IEEE 802.1x, Multicast, ICMP, IGMP, SNMP
Default IP address:	192.168.1.108
Audio:	• External microphone input, • Audio output, • Bi-directional audio streaming support, • Audio detection
Web browser access ports:	80, 37777
PC client access ports:	37777
WEB Server:	Built-in, NVR compliance
Memory card slot:	Micro SD memory cards up to 128GB support (possible local recording)
Mobile client access ports:	37777
Max. number of on-line users:	20
Port ONVIF:	80
ONVIF:	16.12
RTSP URL:	rtsp://admin:hasło@192.168.1.108:554/cam/realmonitor?channel=1&subtype=0 - Main stream rtsp://admin:hasło@192.168.1.108:554/cam/realmonitor?channel=1&subtype=1 - Sub stream
Mobile phones support:	Port no.: 37777 or access by a cloud (P2P) • Android: Free application **DMSS** • iOS (iPhone): Free application **DMSS**
RS-485 interface:	—
Main features:	• D-WDR - Wide Dynamic Range • 3D-DNR - Digital Noise Reduction • EIS - Electronic Image Stabilization • ROI - improve the quality of selected parts of image • F-DNR (Defog) - Reduction of image noise caused by precipitation • SSA - Smart Scene Adaptive - intelligent scene adaptation by automatically adjusting the exposure parameters to obtain a better image • AGC - Automatic Gain Control • ICR - Movable InfraRed filter • WB - White Balance (ATW/AWB/manual/indoor/outdoor) • BLC - configurable Back Light Compensation • HLC - High Light Compensation (spot) • Day/Night mode (color/b&w/auto) • Motion Detection • Configurable Privacy Zones • Sharpness - sharper image outlines • Mirror - Mirror image • Audio detection • IVS analysis : crossing the line (tripwire), intrusion, scene changing, abandoned/missing object, face detection, people counting • Heat map - the selection in the image by corresponding colors the areas with different traffic
Power supply:	• ePoE, • PoE (802.3at), • 12 V DC / 1.1 A - Heater on
Power consumption:	≤ 13 W

Housing:	Compact, Metal / Plastic
Color:	White
"Index of Protection":	IP67
Vandal-proof:	IK10
Supported languages:	Polish, English, Bulgarian, Czech, Danish, Finnish, Greek, Norwegian, Swedish, Hungarian
Operation temp:	-40 °C ... 60 °C
Manufacturer / Brand:	DAHUA
Weight:	1.2 kg
Dimensions:	273 x 95 x 96 mm
Guarantee:	**3 years**

Side view:

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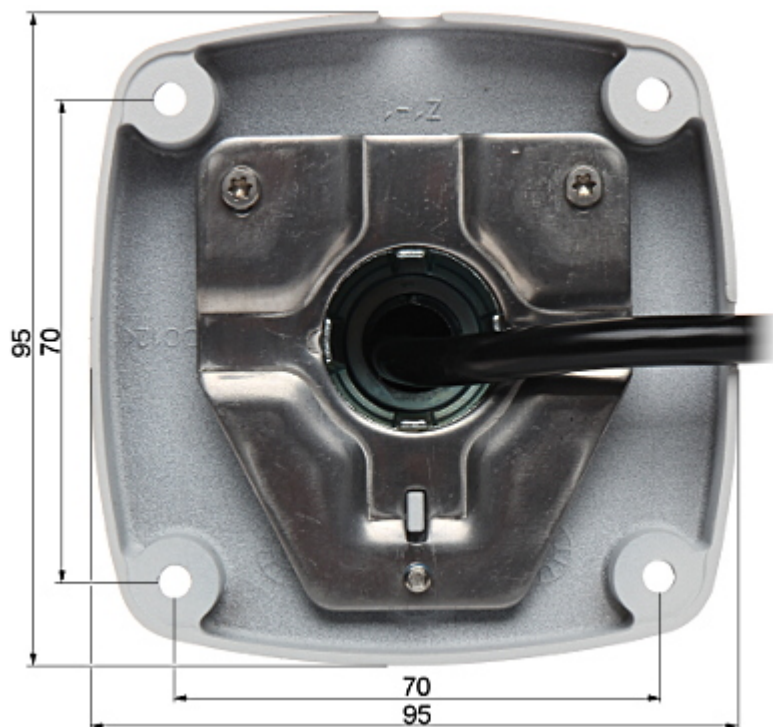e-mail: delta-opti@delta.poznan.pl; tel: +(48) 61 864 69 60

Bottom view:

Bottom view (after remove the cover):

Camera mounting side view:

Camera connectors:
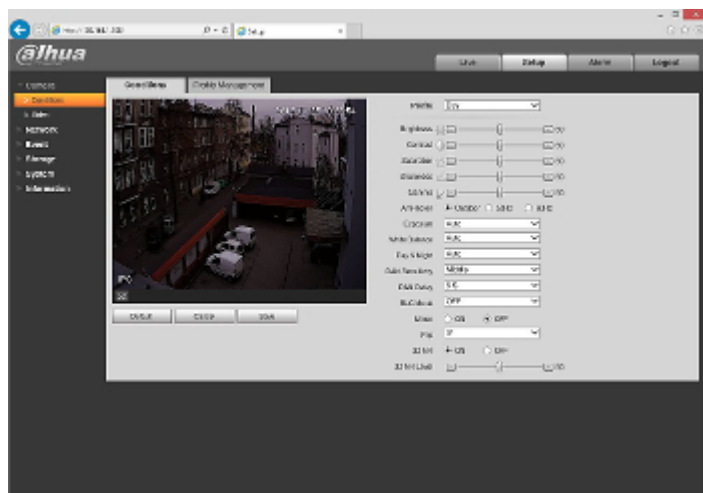

In the kit:

Example captures of device interface:

PACKAGE

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