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.

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

User Manual

Code: SD6AL233XA-HNR-IR

IP SPEED DOME CAMERA OUTDOOR **SD6AL233XA-HNR-IR** - 1080p, 5.8 ... 191.4 mm DAHUA



IP camera equipped with very good high resolution sensor. Due to above it is perfect solution for surveillance systems requiring persons or vehicles recognition. Thanks to the "Starlight" technology used, the camera only needs very low lighting to obtain a clear color image.

The biggest advantage of the camera is the lens with x33 optical zoom, which together with long range IR illuminator allow to 24 hours surveillance without any additional lighting even at area of several hundred meters.

The IR illuminator consisting of a laser with adjustable beam angle allows for precise lighting of the objects even at very large distances. The range of IR illumination according to the manufacturer data, depends on outer conditions (visibility - air transparency, environment, wall colors ie. scene reflectance).

In addition camera is equipped with lens wiper remote controlled via TCP/IP interface. For a few models of IP cameras working at ≥ 1920 x 1080 resolution we recommend to use of network with 1Gb/s bandwidth.

Standard:	TCP/IP
Sensor:	1/1.8 " Progressive Scan CMOS
Matrix size:	2.1 Mpx
Resolution:	1920 x 1080 - 1080p , 1280 x 960 - 1.3 Mpx , 1280 x 720 - 720p
Scanning system:	Progressive
Lens:	5.8 ... 191.4 mm
View angle:	60.1 ° ... 3.2 ° (manufacturer data)
Optical zoom:	x 33
Digital zoom:	x 16
Range of IR illumination:	300 m
Video output:	–
Preset rotation speed:	max. 240 °/s
Rotation speed (manual control):	0.1 °/s ... 200 °/s (horizontal) 0.1 °/s ... 120 °/s (vertical)
Horizontal rotation range:	360 ° continuous

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

Vertical rotation range:	-20 ° ... 90 °
RS-485 interface:	–
Protocols:	Pelco-D, Pelco-P, DH-SD Auto detection
Number of presets:	300
Horizontal scan:	✔
Route settings:	8
Image compression method:	H.265 / H.264 / MJPEG
Alarm inputs / outputs:	7 / 2
Audio:	• External microphone input • Audio output • Bi-directional audio streaming support
Main stream frame rate:	1 ... 50 fps - 1080p
Network interface:	10/100 Base-T (RJ-45)
Network protocols:	IPv4/IPv6, HTTP, HTTPS, TCP/IP, UDP, UPnP, ICMP, IGMP, RTP, SNMP, NTP, DHCP, DNS, PPPoE, DDNS, FTP, QoS, IEEE 802.1x
WEB Server:	Built-in, NVR compliance
Max. number of on-line users:	20
ONVIF:	✔
Mobile phones support:	Port no.: 37777 or access by a cloud (P2P) • Android: Free application DMSS • iOS (iPhone): Free application DMSS
Default IP address:	192.168.1.108
Default admin user / password:	admin / -
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 rtsp://admin:hasło@192.168.1.108:554/cam/realmonitor?channel=1&subtype=1 - Sub stream
Memory card slot:	Micro SD memory cards up to 256GB support (possible local recording)

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

Main features:	• WDR - 120 dB - Wide Dynamic Range • 2D-DNR, 3D-DNR - Digital Noise Reduction • EIS - Electronic Image Stabilization • F-DNR (Defog) - Reduction of image noise caused by precipitation • ROI - improve the quality of selected parts of image • Day/Night mode (color/b&w/auto) • WB - White Balance (ATW/AWB/manual/indoor/outdoor) • ICR - Movable InfraRed filter • Configurable Privacy Zones - 24 • BLC/HLC - Back Light / High Light Compensation • Sharpness - sharper image outlines • Mirror - Mirror image • Lens wiper remotely controlled via TCP/IP • IVS analysis : Intelligent Object Tracking, crossing the line (tripwire), intrusion, abandoned/missing object, face detection • SMD PLUS - searching for an object classified as: human, motor vehicle, non-motor vehicle
Power supply:	• Hi-PoE, • 24 V AC / 3 A (power adapter included)
Power consumption:	• ≤ 20 W • ≤ 32 W - IR illuminator
Housing:	Speed Dome Metal
Color:	White
Operation temp:	-40 °C ... 70 °C
"Index of Protection":	IP67
Weight:	5.8 kg
Dimensions:	Ø 240 x 382 mm
Supported languages:	Polish, English
Manufacturer / Brand:	DAHUA
Guarantee:	**3 years**

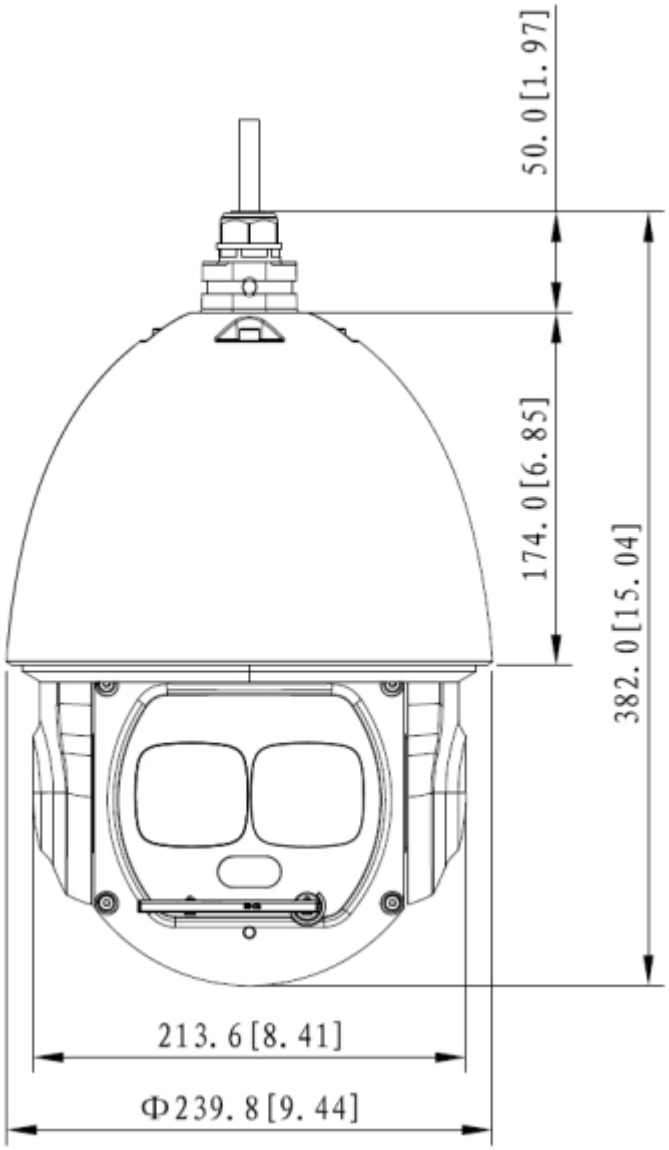
Bottom view:

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



Camera dimensions:

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



See how to initialize DAHUA cameras:
:

PACKAGE

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

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