



User Manual

Code: DH-SD60220T-HN

IP SPEED DOME CAMERA OUTDOOR **DH-SD60220T-HN** - 1080p 4.7 ... 94.0 mm DAHUA

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 image compression algorithm for clear and smooth video streaming at maximal resolution of 1080p. Due to above it is perfect solution for surveillance systems requiring persons or vehicles recognition.

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

For a few models of IP cameras working at $\geq 1920 \times 1080$ resolution we recommend to use of network with 1Gb/s bandwidth.



Standard:	TCP/IP
Sensor:	1/2.8 " Progressive Scan Exmor CMOS
Matrix size:	2.1 Mpx
Resolution:	1920 x 1080 - 1080p 1280 x 720 - 720p 704 x 576 - D1
Scanning system:	Progressive
Lens:	4.7 ... 94.0 mm
View angle:	56 ° ... 3.1 ° (manufacturer data) 57 ° ... 4.1 ° (our tests result)
Optical zoom:	x 20
Digital zoom:	x 16
Min. illumination:	• 0.05 Lux @ F1.6 (color), • 0.005 Lux @ F1.6 (B/W)
S/N ratio:	> 50 dB
Video output:	1 Vpp / 75 Ω
Preset rotation speed:	max. 600 °/s
Rotation speed (manual control):	0.1 °/s ... 300 °/s (horizontal) 0.1 °/s ... 150 °/s (vertical)



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Horizontal rotation range:	360 ° continuous
Vertical rotation range:	-15 ° ... 90 °
RS-485 interface:	—
Number of presets:	300
Horizontal scan:	✓
Route settings:	8
Image compression method:	H.264 / MJPEG
Bitrate:	448 ... 8192 kbps - H.264 1024 ... 16384 kbps - MJPEG
Alarm inputs / outputs:	7 / 2
Audio:	<ul style="list-style-type: none">• External microphone input• Audio output• Audio detection
Main stream frame rate:	1 ... 25 fps - 1080p 1 ... 50 fps - 720p
Network interface:	10/100 Base-T (RJ-45)
Network protocols:	IPv4/ IPv6, HTTP, HTTPS, SSL, TCP/IP, UDP, UPnP, ICMP, IGMP, SNMP, RTSP, RTP, SMTP, NTP, DHCP, DNS, PPPOE, DDNS, FTP, IP Filter, QoS, Bonjour, 802.1x
WEB Server:	Built-in, NVR compliance
Max. number of on-line users:	20
ONVIF:	2.42
Memory card slot:	Micro SD memory cards up to 64GB support (possible local recording)
Main features:	<ul style="list-style-type: none">• D-WDR - Wide Dynamic Range• 2D-DNR, 3D-DNR - Digital Noise Reduction• ICR - Movable InfraRed filter• Configurable Privacy Zones - 24• BLC/HLC - Back Light / High Light Compensation• Sharpness - sharper image outlines• Mirror - Mirror image• Day/Night mode (color/b&w/auto)• Audio detection• Additional "Spot" CVBS output - allows to quick view the image from camera and its configuration without the need to disconnect it from monitoring system• IVS analysis : crossing the line (tripwire), intrusion, abandoned/missing object, face detection
Mobile phones support:	Port 37777 <ul style="list-style-type: none">• Android: Free application DMSS• iOS (iPhone): Free application DMSS
Default IP address:	192.168.1.108
Default admin user / password:	admin / admin
Web browser access ports:	80, 37777
PC client access ports:	37777
Mobile client access ports:	37777

Port ONVIF:	80
RTSP URL:	rtsp://admin:haslo@192.168.1.108:554/cam/realmonitor?channel=1&subtype=0 - Main stream rtsp://admin:haslo@192.168.1.108:554/cam/realmonitor?channel=1&subtype=1 - Sub stream
Power supply:	<ul style="list-style-type: none"> PoE (802.3at), 24 V AC / 3 A (power adapter included)
Power consumption:	13 W 20 W - Heater on
Housing:	Speed Dome Metal
Color:	White
"Index of Protection":	IP67
Vandal-proof:	IK10
Operation temp:	-40 °C ... 70 °C
Weight:	4.1 kg (with bracket)
Dimensions:	222 x 330 x 415 mm (with bracket)
Supported languages:	English, Polish
Manufacturer / Brand:	DAHUA
Guarantee:	3 years

Bottom view:



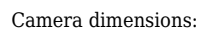
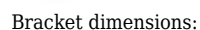
Memory card slot:

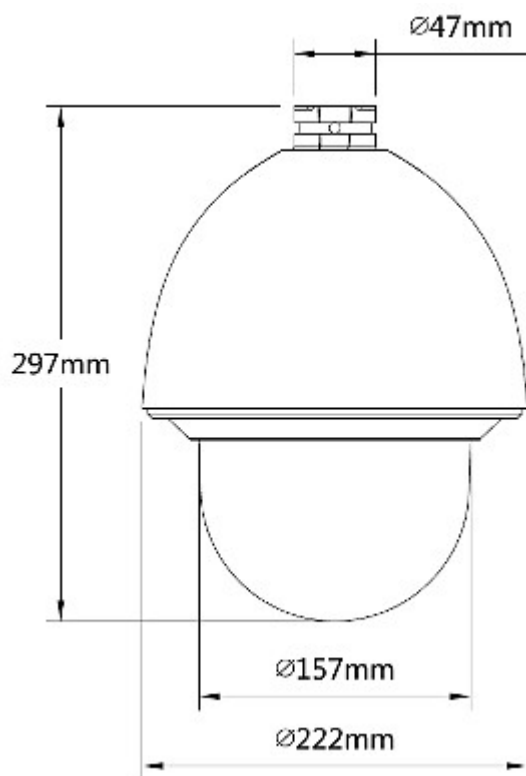


Connectors:



Connectors description:





In the kit:



PACKAGE

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