



User Manual

Code: DS-2TD1228-2/QA

IP HYBRID THERMAL IMAGING CAMERA **DS-2TD1228-2/QA** 2.1 mm - 720p, 2.2 mm - 4 Mpx
Hikvision

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.

The DS-2TD1228-2/QA Thermal Imaging Camera is a modern solution that allows to detect the presence of people, animals and vehicles regardless of prevailing vision conditions. The device is equipped with sensitive VOx microbolometer that allows to observe the objects in fog, smoke and in the absence of illumination.

An additional advantage of the DS-2TDxxxx series cameras is the ability to detect fire and send a signal to the alarm control panel when it occurs.



Sensor:	Uncooled VOx microbolometer
Matrix size:	256 x 192 px
Pixel pitch:	12 µm
Thermal sensitivity (NETD):	≤ 40 mK @ F1.1
Spectral range:	8 µm ... 14 µm
Color palettes:	✓
Lens:	2.1 mm
View angle:	90 °
Optical zoom:	—
Digital zoom:	2x, 4x
Resolution:	1280 x 720 - 720p , 704 x 576 640 x 512 320 x 240
Temperature measurement:	<ul style="list-style-type: none"> • Spot • Line • Area max. 21 positions
Temperature measurement range:	-20 °C ... 150 °C



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Accuracy of temperature measurement:	± 8 °C
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VIDEO CAMERA:

Sensor:	1/2.7 " Progressive Scan CMOS
Matrix size:	4 Mpx
Lens:	2.2 mm
View angle:	117.8 °
Optical zoom:	—
Digital zoom:	—
Range of IR illumination:	15 m
White light LED illuminator range:	30 m
Resolution:	2688 x 1520 - 4 Mpx 1920 x 1080 - 1080p 1280 x 720 - 720p

General information:

Standard:	IP
Video output:	—
RS-485 interface:	✓
Memory card slot:	Micro SD memory cards up to 256GB support (possible local recording)
Image compression method:	H.265 / H.264 / MJPEG
Alarm inputs / outputs:	1 / 1
Audio:	<ul style="list-style-type: none">• External microphone input / Audio input,• Audio output,• Bi-directional audio streaming support,• Speaker built-in
Main stream frame rate:	25 fps @ 4 Mpx
Network interface:	10/100 Base-T (RJ-45)
WEB Server:	Built-in
Max. number of on-line users:	32
ONVIF:	✓
Mobile phones support:	Port no.: 8000 or access by a cloud (P2P) <ul style="list-style-type: none">• Android: Free application iVMS-4500 or Hik-Connect• iOS (iPhone): Free application iVMS-4500 or Hik-Connect
Default IP address:	192.168.1.64
Default admin user / password:	admin / - 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



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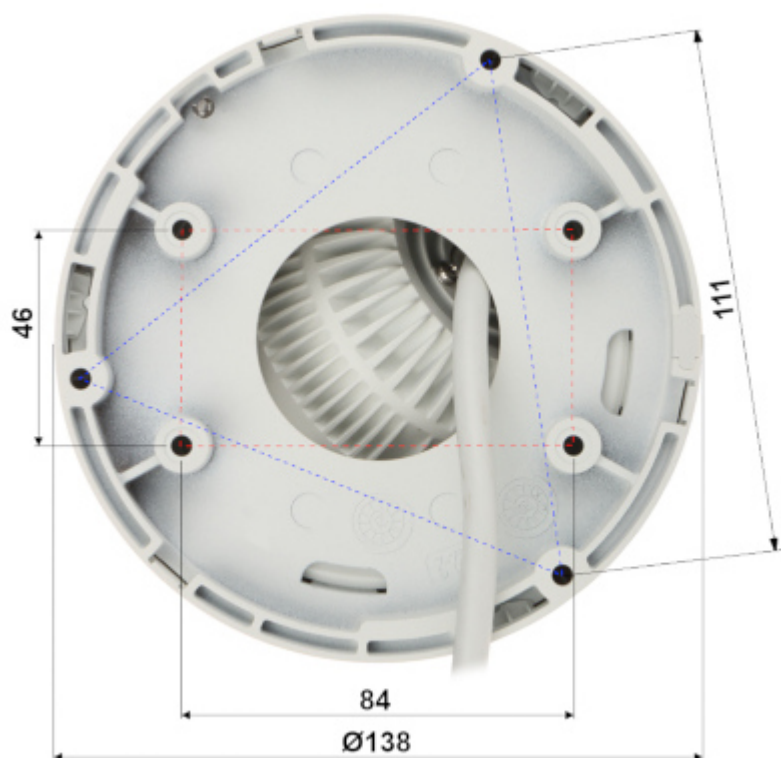
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Port ONVIF:	80
RTSP URL:	<ul style="list-style-type: none">• Main stream VIDEO CAMERA : rtsp://user:password@192.168.1.64:554/Streaming/Channels/101/ THERMAL IMAGING CAMERA : rtsp://user:password@192.168.1.64:554/Streaming/Channels/201/• Sub stream VIDEO CAMERA : rtsp://user:password@192.168.1.64:554/Streaming/Channels/102/ THERMAL IMAGING CAMERA : rtsp://user:password@192.168.1.64:554/Streaming/Channels/202/
Intelligent image analysis:	<ul style="list-style-type: none">• IVS analysis : crossing the line (tripwire), intrusion, detection of entry into the area / exit from the area• Smoke detection• fire detection• object detection (people, vehicle)
Main features:	<ul style="list-style-type: none">• WDR - 120 dB - Wide Dynamic Range• 3D-DNR - Digital Noise Reduction• AGC - Automatic Gain Control• DDE (Digital Detail Enhancement) - the function automatically optimizes the contrast of the thermal image in high-dynamic scenes - small differences in the temperature distribution of the examined object are highlighted• Sun-reflection filter• Temperature measurement• Intelligent alarm linked to turning on white light and loudspeaker• NAS - Network Attached Storage support - allows to connect memory resources directly to the computer network• The ANR (Automatic Network Replenishment) function - ensures integrity of recording data in the event of network failures. It bases on automatic saving the recording data to microSD card inserted inside the camera, and after failure is end, the recorded data are automatically synchronized with the recorder
Protections:	<ul style="list-style-type: none">• Protection against lightning discharges : 6 kV• Overvoltage limiter, Overvoltage protection
Power supply:	<ul style="list-style-type: none">• PoE (802.3af),• 12 V DC / 500 mA
Power consumption:	$\leq 6 \text{ W @ } 12 \text{ V DC}$ $\leq 6.5 \text{ W @ PoE (802.3af)}$
Housing:	Dome - Metal
Color:	White
"Index of Protection":	IP67
Mechanical protection class:	—
Operation temp:	-40 °C ... 65 °C
Weight:	0.94 kg
Dimensions:	Ø 138.3 x 123.1 mm
Supported languages:	Polish, English, Bulgarian, Croatian, Czech, Danish, Estonian, Finnish, French, Greek, Spanish, Dutch, Lithuanian, Latvian, German, Norwegian, Portuguese, Russian, Romanian, Serbian, Slovak, Slovenian, Swedish, Turkish, Hungarian, Italian
Manufacturer / Brand:	Hikvision
SAP Code:	305401564
Guarantee:	3 years

Camera is out from clamping ring:



Camera mounting dimensions:



Connectors:



In the kit:



PACKAGE

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