

Thermal imaging camera SDP-8415M



Purpose

SDP-8615M thermal imaging camera (hereinafter referred to as the thermal imaging camera) is used to arrange round-the-clock video surveillance in thermal range of large open spaces in a wide range of weather conditions.

The thermal imaging camera is a highly efficient uncooled camera based on a microbolometer implemented in sealed body. The thermal imaging camera detector detects the surface temperature drop of objects relative to the background environment. The thermal imaging camera is manufactured in a special shockproof anti-vandal sealed body.

The thermal imaging camera features:

- an adaptive system for automatic adjustment of the image brightness and contrast, which allows for increasing the detecting properties and improving the representativeness of the image for the operator and automatic detection systems;
- use of an uncooled high-sensitivity detector provides for a clear image.

It is recommended to place the thermal imaging camera on the mast with a height of 8-30 m and used in conjunction with DVS-808 long-range video camera mounted on pan/tilt unit.

Never point SDP-8415M camera lens to the sun. Direct sunlight can damage the camera detector.

Application

SDP-8415M thermal imaging camera is used to arrange round-the-clock video surveillance in thermal range of large open spaces, offshore zones, long-distance facilities, and the State borders, as well as to enforce fire control in daytime and at night.

SDP-8415M thermal imaging camera is used as part of Video Surveillance and Thermal Imaging Systems manufactured by Stilsoft.

Specifications

Parameter	Value
Matrix - detector	Microbolometer
Spectral range, μm	7-14
Video image resolution	384x288
Frames per second, Hz	25
Pixel size, μm	25
Video signal standard	Composite, PAL
Matrix life, h	25000
Continuous operation time, min., h	2900
Restoring time of operating mode, max., s	5
Field-of-vision, $^{\circ}$	13.7x10.3
Management interface	RS-232
Mode control	Palette (black&white, inverted black&white), NUC
DC power voltage, V	from 9 to 28
Power consumption, max., W	3.5
Optics	Motorized
Minimum focal length, m	1
Minimum viewing distance, m	50
Focal length, mm	150F1
Threshold temperature change sensitivity, $^{\circ}\text{C}$	0.1
Deviation of color shades from actual values, $^{\circ}\text{C}$	± 1
Target detection range, up to, m	
– of "vehicle" type	6900
– of "human" type	2700
Target recognition range, up to, m	
– of "vehicle" type	4800
– of "human" type	1,500
Acceptable number of dead pixels, up to, %	1
Overall dimensions, max., mm	480x210x202
Weight, max., kg	10
Operating temperature range, $^{\circ}\text{C}$	-40 to +50
Ingress protection	IP65

Connection

SDP-8415M thermal imaging camera is connected to SDP-808 pan/tilt unit by special cable to the connector located on the rear body wall.



Port for connection of thermal imaging camera

Connector contact assignment:



Cont. No.	Designation
1	Video
2	Common video
3	Common power
5	+12V Power
18	Common RS-232
19	Rx RS-232
20	Tx RS-232

Contacts 4, 6-17 – not used.