

Dual Sensor Monochrome Day & Night-Vehicle Mounted Camera with Washer Nozzle and Objective Window Heating

type number 01133



Preliminary

Main Features:

This camera joins the advantages of ultra low light monochrome CCD-camera technology (Visual Light Imager) and longwave thermal sensing technology (Thermal Imager). It is the best choice if you want to see all without being seen.

Features of the Ultra Low Light CCD-Camera:

- Produces clear images on both day and night conditions without artificial lighting. The camera can automatically change between day and night modes of operation depending on the intensity of illumination.
- No need for artificial illumination in the night mode
- Superior light sensitivity comparable to Image-Intensified CCD cameras is attained by forward looking video processing inside the CCD-Sensor
- Main advantages over Image-Intensified CCD cameras are: excellent daylight performance and image sharpness, reliability, long lifetime and better price-performance ratio.

Features of the Thermal Imager:

- helps to detect and recognize potential hazards in total darkness, smoke, rain, snow and fog
- sure detection and recognition of persons and animals

Technical Data Thermal imager:

Sensor type:	high resolution uncooled long-wave microbolometer array
Active pixels:	640 x 512 (H x V)
Spectral band:	7.5-13.5 nm
Sensitivity:	>50 mk
Angle of view:	69 °H / 56 °V (another angle of view on request)

Technical Data Visual Light Imager:

Sensor type:	1/3" EXview HAD B & W CCD
Active pixels:	752 x 582 (H x V)
Horizontal resolution:	570 TVL
Exposure control:	Shutter iris and AGC
Sensitivity (day):	0,3 Lux for 48 dB SNR, 40 IRE
Sensitivity (night):	0,00025 Lux for 20dB SNR,40 IRE
Angle of view:	matched to thermal Imager

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System Features

- Applicable as front or rear view camera and for observation of vehicle surroundings
- Rugged, water-proof and extremely shock and vibration resistant camera housing for use under harsh environmental conditions as in armoured wheeled or tracked military vehicles
- Lens windows cleaned with high pressure water jet
- Cleaning nozzles and a check valve integrated at the camera housing
- Heating for quick de-icing of the objective lens windows with a variety of configuration possibilities:
 - automatic heating at low temperature
In this case, heating can be inhibited to make the camera invisible for enemys infrared cameras.
 - Heating switchable by display with time function
 - Heater connected in parallel to the heating of outside rear view mirror or windscreen switched by mirror/windscreen de-ice timer relay or temperature sensor.

Optional Accessories:

- Displays with integrated camera power supply and remote control for wash pump and camera de-icing
- Mounting adapters and wiring harnesses for various vehicles
- Video distribution units

Technical Data System:

Video standard:	CCIR / STANAG 3350B (EIA / STANAG 3350C version on request)
Video output:	VBS 1 Vss / 75 Ω
Connection:	Shielded cable with SJT- plug
Power supply:	filtered 12 Vdc +/-10 %; 4 W by drivers display (Versions with 24 Vdc or 12 Vdc automotive power supply conforming to VG 96916-5 or MIL on request)
Objective lens heating:	12 Vdc or 24 Vdc / 6 W
Fluid pressure:	>2,5 bar (as from headlamp wash pump)
Fluid connection:	inner diameter of hose=5 mm
Temperature:	-40 °C to +63 °C (operating) -40 °C to +90 °C (storage)
Dimensions:	146 x 110 x 140 mm (W x H x D)
Weight:	approx. 2 Kg
Colour:	RAL 6031 bronze green or TBD
EMC / EMI:	VG 95373 (MIL-Std-461E on request)
Protection:	IP 68 (immersion depth up to 2 m)
Environmental specification:	MIL-Std-810E

Ask for further technical information!
Functional or interface modifications can be realized on request. Each configuration change causes a new type number.

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