

DUALSEC™

Day & Night Observation Head

Description



DUALSEC™ is a powerful around the clock, day and night multi sensor observation head, especially developed for security applications. It allows medium range observation and detection using state of the art thermal imaging and CCD technology. DUALSEC™ features a strong 1/4" Sony CCD camera for day time operation, and an Opgal uncooled dual field of view thermal imaging camera for day and night operations.

The usage of zoomable CCD and dual FOV thermal imager makes it ideal for wide field-of-view situational awareness and detection, as well as narrow field-of-view medium-range target recognition. DUALSEC™ is ruggedized to withstand the harshest weather and environmental conditions, including rain, direct sunlight, high humidity and dust.

Applications

DUALSEC™ can be easily mounted on a PTZ for flexible 360 degrees FOV observation or be used on different sites, using a mobile tripod based.

It is ideal for perimeter surveillance and protection of national boards, airports, pipelines, oil terminals, power stations, industrial facilities and other sensitive sites.

Features & Benefits

- Thermal camera with resolution of 320X240 or 640X480
- Dual FOV 45/135mm with auto focus thermal imaging
- 36X optical zoom CCD with continuous digital zoom 12X
- Light weight robust system
- Cameras sealed proof for water, sand and dust
- Easy mechanical mounting interface
- Friendly Integration and maintenance
- Communication: RS 232, RS 422, Pelco-D
- Easy installation and maintenance
- Simple integration with PTZ
- Presenting identification abilities
- Light weight
- Ruggedized and robust



DUALSEC™

Technical Data

Mechanism Parameters

	Night Camera	Day Camera
Specifications	Thermal Camera ARBEL	CCD Sony Camera FCB-EX1000P
FPA \ Image Sensor	Long wave Micro bolometer 384x288 \ 640x480	1/4-type EX-view HAD CCD
Spectral Band	8 – 12 μm	Visible
NETD	< 50°mK (with F#1 optics)	
Video Output \ Signal	CCIR or RS-170	NTSC (380k pixel) PAL (440k pixel)
Operating voltage	9 – 28 VDC	6 – 12 VDC
Power consumption	2.2 W steady state	1.6 W inactive \ 4.0 W active motors
Control Operation	Polarity, NUC, Image Flip, Manual Gain/Level, e-Zoom, Focus Corrections	Auto, Manual, Priority mode, Bright, EV compensation, Backlight compensation, Slow AE
Field Of View	Dual	
	wide (45mm)	narrow (135mm)
384x288	12.2° X 9.2°	4.1° X 3.1°
640x480	20.2° X 15.1°	6.8° X 5.1°
e-zoom	x2 and x4 \ continues zoom	12x (432x with optical zoom)
Focus	Auto Focus corrections (640 X 480)	Auto (Sensitivity: normal, low), One- push AF, Manual, Infinity, Interval AF, Zoom trigger AF
Image Processing	Enhanced Mode for improved detection	

Thermal Camera Performance

Targets	NATO (2.3mX2.3m)		Human (1.7mX0.5m)	
	Detection	Recognition	Detection	Recognition
Wide FOV 45 mm	2000m	690m	830m	280m
Narrow FOV 135 mm	6200m	2000m	2500m	830m

System Parameters

Power Supply	12VDC
Storage Temperature\Humidity	-40°C - 60°C
Operating Temperature\Humidity	-32°C - 55°C
Power Requirements\Power Consumption	12VDC 6.4W (16.4W during CCD heaters operation)
Weight	7.35 Kg
IP Rate	IP66
Remote operation	Optima SW interface
Dimensions	321mm (L) X 190mm (H) X 312mm (W)



>> For information on ordering please contact us or send an e-mail to: sales@opgal.com. All specifications are subject to change without notice. March 2010. All rights reserved.