

Applications

- Low Light Surveillance
- Mid-Water Navigation Tasks
- General Observation & Situational Awareness

IM13-136 IP & IM13-137 IP



Extreme Low Light Monochrome Underwater CCD Camera

- 95° Wide AOV Excellent
- Low Light Performance
- 4500msw Depth Rating

The IM13-136HD IP (25HZ) and IM13-137HD IP (30HZ) extreme low light, monochrome camera has been designed primarily for use in subsea environments and are ideally suited to low light surveillance including mid-water and long-range navigation tasks, general observation and situational awareness applications.

The IM13-136/137 HD IP camera offers both exceptional low light sensitivity and a wide AOV (95° diagonal) in water. The IM13-136/137 HD IP Incorporates advanced imaging processing technology, delivering a significantly improved low light performance over conventional low light SIT, CCD and CMOS sensors in all subsea environments.

The video image will appear in focus from an estimated 610mm in front of the port to infinity, making the IM13-136/137 HD IP an excellent choice for both navigation and general observation applications.

Packaged within a robust 4500msw depth rated titanium alloy housing the IM13-136/137 HD IP provides a high-definition video output via the DBH13MTI connector or customer specified external connector.



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Technical Specifications

Performance	
Horizontal Resolution	800 TVL/PH
Sensitivity	IR filter fitted 76 microlux faceplate (300TVL limit)
Minimum Scene illumination	IR filter fitted 1335 microlux faceplate (300TVL limit)
Boot up time	< 25 seconds
Signal to noise Ratio	50db (weighted)
Electrical	
Scan Standard	IM13-136IP:1632 X 1248p,25HZ 1280 X 720p, 25HZ 816 (H) X 624 (V) Active pixels IM13-137IP:1632 X 1248p,30HZ 1280 X 720p, 30HZ 816 (H) X 624 (V) Active pixels
Power Input	16 – 24 VDC, 700mA (max) (900mA Inrush)
Optical	
Lens	5mm F2.0
AOV in water	Diagonal: 95° Horizontal :70.5° Vertical: 52.5°
Iris Control	None (Electronic shutter)
Focus Range	Fixed Focus 610mm to infinity (in water)
Mechanical	
Dimensions	Diameter: 88mm (main body)110mm at front end Length: 164mm (excl. connector)
Weight	In air: 2.56 Kg In water: 1.79 Kg
Housing Material	Titanium alloy 6AL/4V ASTM B3 48
Interface	
Connector	DBH13MTI or customer specified
Interface Method	10/100Mbps Ethernet
Video compression	H.264
Streaming Protocols	RTSP, MPEG-TS
Video Framerate	25-30fps
Bit rate	100Kbs-10MBS (Default 8Mbps)
Latency	250ms (Glass to Glass) Nominal
Network Protocols	IPv4, TCP, UDP, IGMP, (MULTICAST) HTTP, RTSP & DNS
Environmental	
Operating Depth	4500 msw (other depth rated housing options available)
Temperature	Operating: -5 to 40°C Storage: -20 to 60°C
Shock	30G peak acceleration, 25ms half sine duration, on all three axes
Vibration	10G, from 20 to 150HZ on all three axes
Electromagnetic Compatibility	BS EN 61000-6-3: 2001 Emission BS EN 61000-6-1: 2001 Immunity

