

Applications

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

IM13-136 & IM137 HD-SDI



Extreme Low Light Monochrome Underwater CCD Camera

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

The IM13-136 (25Hz) and IM13-137 (30Hz) HD-SDI extreme low light, monochrome cameras have 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-SDI cameras offer both exceptional low light sensitivity and a wide AOV (95° diagonal) in water. The IM13-136/137 HD-SDI incorporates an 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-SDI 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-SDI provides a high definition video output via the Scorpion 455-L-FCR connector or customer specified external connector.

The IM13-136/137 HD-SDI is supplied in a rugged transit case with a handheld infra-red remote control which has been intuitively designed for ease of use.

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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 | < 3 seconds |
| Signal to noise Ratio | 50db (weighted) |
| Electrical | |
| Scan Standards | IM13-136:1280x720p 25hz - 816(H) X 624 (V) Active pixels IM13-137:1280x720p 30hz - 816(H) X 624 (V) Active pixels |
| Video output | 1.485Gbps HD-SDI SMPTE -292 compatible output 75 Ohm |
| 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 |
| Connector | Scorpion 455-L-FCR-00-1000 or customer specified |
| 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 |