

V-ATDN-36-W Specification Sheet



Rugged PTZ Thermal Camera

The Oculus Ti is a professional, vandal resistant, high speed continuous rotation PTZ dual head thermal camera.

The camera offers thermal detection of intruders at long range, day or night, in any weather, with simultaneous optical video output for video verification. As a thermal/optical unit it can also be used to provide temperature indication of fire or thermo graphic applications.

As part of the Oculus range, the housing has been cast from aluminium which is then hard anodised and powder coated allowing the unit to be installed in harsh and challenging environments. Utilising Optical Incremental Encoders, Oculus can accurately pinpoint and maintain its position, automatically correcting itself should an external force cause the head to move.

The unique design allows the Oculus to be mounted upright, inverted or cantered offering complete 360 degree coverage with no blind spots. A range of mounting accessories is available with an industry standard 4" PCD mounting platform.

Key Features

- Combined Thermal and Optical Unit
- Long range detection up to 1000 metre range. (12 degree lens)
- Temperature scale
- Dual Video output
- Multiple thermal lens option
- Thermal white hot and black hot control
- User definable temperature related colour palette
- Flexible mounting option
- High resolution Day/Night 36x optical camera module



- High speed pan and tilt system
- Presets, tours and privacy masks as standard
- Hard anodised IP67 aluminium housing
- Multiple protocols
- Wiper as standard

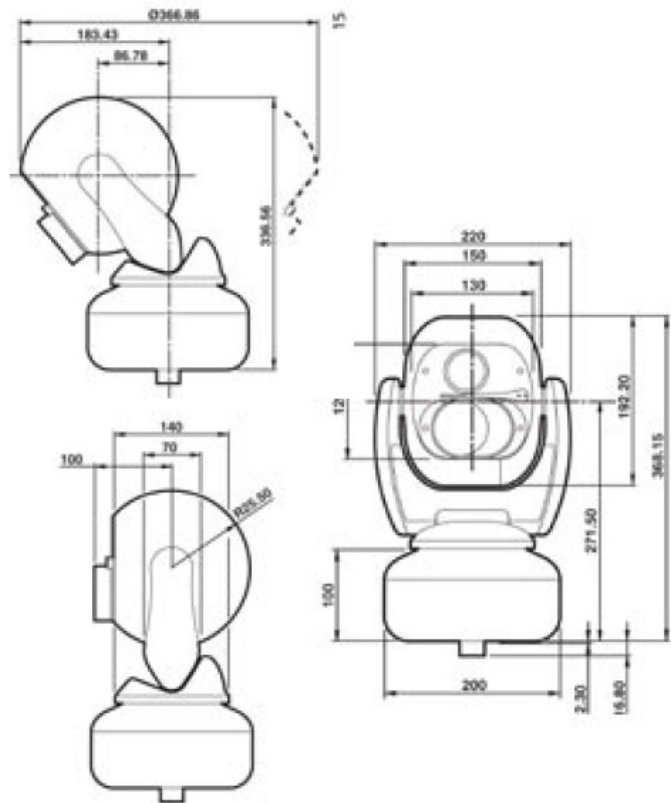
Thermal Module

- Detector Amorphous Silicon Microbolometer (uncooled)
- Spectral Response 7 to 14µm (filter bandwidth)
- Thermal Sensitivity < 50mK, Format 320 x 240 Pixel
- Refresh Rate 9 Hz or 25 Hz (PAL)
- Start-up time ~ 4 seconds
- Contrast / Brightness Advanced Image Processing
- Saturation Temperature 1100°F +/-10% with automatic iris
- Focus 1m to ∞, manual adjustment
- FOV Alternatives 50° x 37.5°, 25° x 19° or 12° x 9°
- Detection range:
 - up to 235m (50° lens, equiv focal length 5.8mm)
 - up to 445m (25° lens, equiv focal length 11mm)
 - up to 1000m (12° lens, equiv focal length 25mm)
- Video Analogue Output PAL
- Output Resolution 768 x 574 pixels for higher-clarity thermal images & zymology overlay
- Customizable Absolute Colour 3 OEM selectable colour points are mapped to selectable absolute temperatures
- Input Voltage 8 to 32V DC
- Input Power ~ 2W @ 25°C ambient, 12V DC
- Power Consumption ≤ 5W
- Resolution 520TVL

Video Module

- Image Sensor 1/4" EXview CCD, Signal System PAL
- Number of total pixels ~440000 pixels
- Lens 36x optical zoom, f=3.4mm (wide) to 122.4mm (tele), F1.6 to F4.5
- Digital Zoom 12x (432x with optical zoom)
- Angle of view (H) 57.8° (wide end) to 1500 mm (tele end)
- Minimum working distance 320 mm (wide end) to 1500 mm
- Sync system Internal / External (V-lock)
- Minimum illumination 1/60 s mode: 1.4lx (typical) (F1.6, 50IRE) or 1/4 s mode: 0.1lx (typical) (F1.6, 50IRE)
- Electronic shutter 1/1 to 1/10000s, 22 steps
- White balance Auto, ATW, Indoor, Outdoor, One-push, Manual
- Privacy zone masking On / Off (24 positions)
- Focusing system Auto (Sensitivity: normal, low), One-push AF, Manual, Infinity, Interval AF, Zoom trigger AF
- Camera operation switch Zoom tele, Zoom wide
- Video Output VBS: 1.0 Vp-p (sync negative), Y/C
- Camera control interface VISCA (TTL signal level)
- Power consumption 6 to 12V DC / 1.6W (motors inactive), 4.0W (motors active)

Mechanical and Electorinc



Mechanical

- Capable of Continuous pan rotation
- Capable of 290° tilt rotation
- Capable of normal and inverted mounting
- Capable of 180°/second pan speed (excluding ramping)
- Capable of 180°/second tilt speed (excluding ramping)
- Fitted with sealed for life bearing
- Long life toothed polypropylene belt drive, for minimum backlash-pulleys bonded to keypad shafts
- Rated to IP67
- 4" pcd mount
- IP67 Multi way connector to support electrical connection requirements, with 10m composite lead

Electronic

- Maintaining preset accuracy with optical encoders with a resolution of 0.01°

- Be capable of retaining position without drift
- Recovering position if forced away by a "non-control" intervention
- 180° pan spin on reaching -90°
- Storage of "wash" preset
- Storage of 32 preset PTZ positions
- Storage of 16 preset tours
- Storage of 4x 1 minute mimic tours
- 8+8 steps of video gain and lift
- Up to 24x privacy zones
- Access to camera configurations via on screen menus
- Stepper motor drive
- Multiple control protocols
- Robust RS485 half duplex data comms, with absolute output.
- Coaxial Telemetry
- Support for 8 x8 alarm inputs on RS485 bus, external to PTZ unit. (With alarm interface card)
- In built real-time clock to support extensively configurable alarm events and actions
- Switch to IR mode via external input (via alarm card)
- Heavy duty slip rings for power, data, video, switching for washer, and bonded earth for lightning protection.
- Power requirements 20-36Vdc or 14-26Vac. 15W peak. Included PSU requires 23V AC.

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