

## AERON TI/R

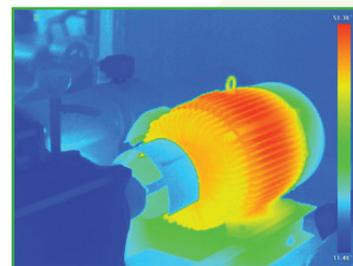
### Rugged pan/tilt camera with video and radiometric thermal

The Aeron TI/R provides thermal alarming when temperature thresholds are exceeded, providing audible and visual alarms to protect valuable assets where the threat of fire, combustion or precise temperature measuring is required. The Aeron TI/R is supplied with both video and thermal modules as standard to ensure detection and visual verification of any event.

The Aeron TI/R is a compact, rugged, continuous rotation PTZ camera that has been specifically designed for harsh and challenging environments. Utilizing the latest optical and thermal cameras, including thermal zoom modules, the Aeron TI/R can provide simultaneous video and thermal outputs providing instant video verification.

#### Key features:

- Detect hot spots through dust and smoke
- Advanced radiometric thermal alarming
- Temperature measured by colour scale
- Ability to set alarms based upon temperature readings
- IP and analogue set-up
- Presets, tours and privacy masking
- Simultaneous video and thermal outputs
- Optical encoders providing positional feedback
- IP67 Environmental Protection (IP68 option)
- 316L stainless steel option
- Temperature analysing to 400m
- 320x240 and 640x480 thermal cores available
- Multiple lens options
- HD video option
- Optically correct window with wiper



Thermal image



Video image

#### The Silent Sentinel Range

Silent Sentinel offer an extensive range of camera and lens configurations to meet your exact surveillance requirements.

Contact customer service for more information on our full range of products and bespoke design and build services.

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[www.silentsentinel.com](http://www.silentsentinel.com)



OCULUS



AERON



OSIRIS



JAEGAR

# AERON

## Aeron standard radiometric thermal range

| Thermal cameras     | SD-RES  | HI-RES                       |
|---------------------|---|------------------------------|
| Optical zoom        | n/a   | n/a                          |
| Sensor type         | Uncooled A-Si Microbolometer  | Uncooled A-Si Microbolometer |
| Pixel size          | 25µ   | 17µ                          |
| Spectral band       | 8-14µm  | 8-14µm                       |
| Thermal sensitivity | <50mK   | <50mK                        |
| Array format        | 384x266   | 640x480                      |
| Frame rates         | 9Hz, 25Hz   | 9Hz, 25Hz                    |
| Image setting       | AGC, BDE, NUC, menu OSD   | AGC, BDE, NUC, menu OSD      |
| Focus               | Manual, motorized (optional)  | Manual, Motorized (Optional) |
| Zoom                | 2x and 4xE-zoom   | 2x and 4xE-zoom              |
| FOV                 | 22° (20mm)  | 22° (20mm)                   |
| Video output        | Composite & IP  | Composite & IP               |
| Ethernet            | 10/100 base T (TCP, DHCP and RAW streaming)   |                              |
| Functions           | 13 Color palettes/2 Alarms trigger/Image filter/Spot/Area/Isotherm/<br>Storage image (.jpg) and recording video clip (.avi)/<br>All pixels temperature data, SDK for programmer |                              |

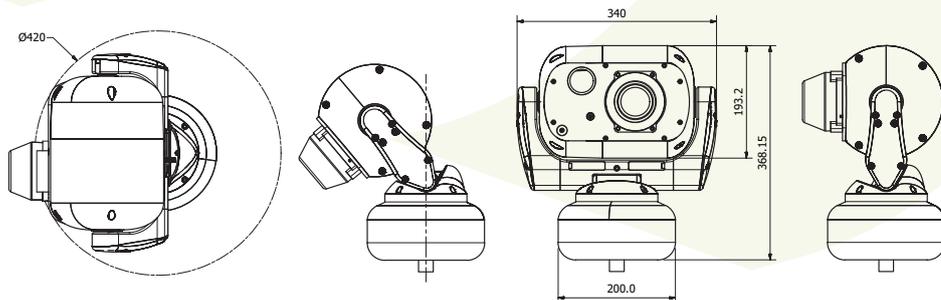
## Mechanical specifications

|  |   |                          |
|--|---|--------------------------|
| Construction                               | Die-cast hard anodised, powder coated aluminium with A4 stainless fittings                                    |                          |
| Turning diameter                           | Normal<br>340mm / 13.40"  | Offset<br>370mm / 14.57" |
| Height                                     | 370mm / 14.57"  |                          |
| Height with adaptor                        | 500mm / 19.68"  |                          |
| Pan rotation limit / speed                 | 360° continuous / 180° per second (excluding ramping)   |                          |
| Tilt rotation limit / speed                | +90° to -30° upright (-68° inclined) +30° to -90° inverted<br>180° per second (excluding ramping)             |                          |
| Weight (with adaptor)                      | 9.3Kg (10.3Kg) 20.70lb (22.90lb)  |                          |
| Mounting profile                           | Upright or inverted   |                          |
| Pan/tilt bearings                          | Sealed for life – no maintenance required   |                          |
| Motor drive                                | Long life toothed polypropylene belt drive<br>Pulleys bonded to keypad shafts for minimum backlash            |                          |
| Environmental rating                       | IP67  |                          |
| Operating temperature range (ambient, dry) | -20°C to +60°C (-40°C to +60°C with optional heater)<br>-4°F to +150°F (-40°F to +150°F with optional heater) |                          |
| Mounting                                   | 4" PCD mount  |                          |
| Connection socket                          | IP67 Neptune multi-way SD, IP67 Marine HD-SDI option and IP67 IP option                                       |                          |

## Electrical, electronic and software specifications

|                                 |   |
|---------------------------------|---|
| Optical encoder preset accuracy | 0.01°   |
| Rotational contacts             | Heavy duty slip rings for power, data, video, switching for washer  |
| Position control                | "Capable of retaining position without drift, Automatic position recovery if forced away by a "non-control" intervention"                     |
| Roll around mode                | Auto 180° pan spin when tilt reaches end of travel while following subjects   |
| Configuration                   | Via on screen menus   |
| Presets                         | 127 + wash preset (repeatability 0.05°)   |
| Tours                           | 16 preset tours (maximum of 60 positions each), four 8 minute mimic tours   |
| Privacy zones                   | Maximum of eight on-screen simultaneously   |
| Communications                  | Coaxial or RS485 half duplex data comms with absolute positioning output  |
| Supported protocols             | Pelco-D, Pelco-P, CBC OCP485, Forward vision mic1 FV300, Philips, Vicon.  |
| Power requirements              | "At Oculus unit: 14 to 36VDC or 14 to 26VAC, 45W peak (100W with optional heater) supplied PSU requires 230VAC. 12VDC support on some models" |
| Additional details              | In-built real-time clock  |

## Dimensions (in millimeters)



## Aeron standard video range

| Video cameras                | SD                               | HD                                 |
|------------------------------|----------------------------------|------------------------------------|
| Part no.                     | PYK40XB                          | IYJ30XB                            |
| Optical zoom                 | 40x                              | 30x                                |
| Digital enlargement          | 12x (480x combined)              | 12x (360x with optical zoom)       |
| Image sensors                | 1/4" Super HAD CCD II            | 1/2.8" type Exmor CMOS sensor      |
| Resolution                   | 670TVL                           | Approx 3.27 million                |
| Signal system                | PAL                              | HD: 1080p/SD:NTSC/PAL              |
| Lens (wide to tele)          | F=3.06mm to 122.4mm F1.6 to F4.6 | f=4.3mm to 129.0mm, F1.6 to F4.7   |
| Angle of view – horizontal   | 60.° (W) to 1.6° (T)             | 54.1° (W) to 2.9° (T)              |
| Minimum illumination (50IRE) | 0.6lux Colour, 0.01lux Mono      | 1.7 lux, 0.5 lux in high sens mode |
| Video output                 | Composite & IP                   | HD-SDI & IP                        |

## Ordering information

| Product code        | Product description  |
|---------------------|--|
| RC4-51PYK40X-CA22FB | Aeron PT Thermal/Video, 27° (20mm) 320x240 25Hz plus 40:1 Sony Video Black           |
| RC4-51PYK40X-CB22FB | Aeron PT Thermal/Video, 27° (20mm) 640x480 25Hz plus 40:1 Sony Video Black           |
| RC4-51HYJ30X-CA22FB | Aeron PT Thermal/Video, 27° (20mm) 320x240 25Hz plus HD 30:1 HD-SDI Sony Video Black |
| RC4-51HYJ30X-CB22FB | Aeron PT Thermal/Video, 27° (20mm) 640x480 25Hz plus HD 30:1 HD-SDI Sony Video Black |

Note: Also available in White and Stainless steel. Change 'B' at the end of the product code with 'W' or 'SS'.

## Multiple programming options

### Software

#### Camera controller

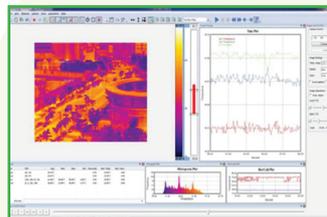
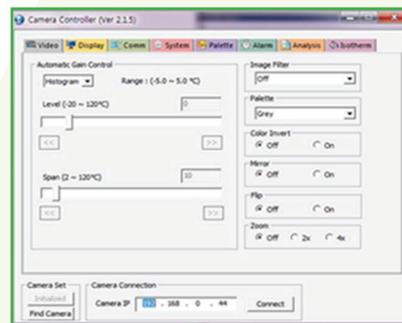
Analog interface setting program for camera connection and control and set-up of internal features/functions.

#### Thermal imaging analyzer

Radiometric R&D program for digital connection and streamed image viewing.

#### Thermal report

Storage images print-out program to customize it.



Designed and manufactured in the UK.

Specifications may be subject to change without notice • DN170714 - 1.1c • © 2014