

## DESCRIPTION

P4466 Argus<sup>®</sup>3 is an advanced, user-friendly, robust thermal imaging camera designed primarily to assist the vision of firefighters in smoke and darkness. It has many further applications where temperatures require monitoring, such as preventative maintenance and condition monitoring of equipment. It also provides vision where light is unavailable. The thermal image can be viewed in greyscale and 7 additional colourised settings. P4466 Argus<sup>®</sup>3 uses Amorphous Silicon (ASi) infrared detector technology.

P4466 Argus<sup>®</sup>3 is a stand-alone, fully automatic camera within an ergonomically designed case. An infrared remote control and PC software are provided, allowing end users to configure the camera to their specific needs; no other control or adjustment equipment is required.

The P4466 Argus<sup>®</sup>3 casing is made from high quality Radel<sup>®</sup> R-5100, chosen for its strength, resistance to heat, water and impact. The camera is sealed to IP67, to withstand driving spray and short-term immersion in water to a depth of 1 metre.

Power is provided by one standard DR series camcorder battery pack or alkaline battery pack located at the rear of the camera. No end-user maintenance is required other than recharging of batteries and post-use external cleaning with a soft cloth.

## FEATURES

- Image capture of up to 26 images
- Choice of 8 colourised display settings
- 256 colour display
- On-screen graphics including zoom and time/date display
- Optional integrated video telemetry
- Spot temperature measurement (optional)
- Remote control setup with stand-alone handset
- 100% internal chassis shock isolation
- Ambient temperature measurement
- End-user software
- x2 zoom

## Mechanical

Overall dimensions (see outline):

without handles . . . . .	125.6 x 271 x 162.6 mm
with handles . . . . .	125.6 x 271 x 300 mm

Camera weight with battery

and handles . . . . .	1.9 kg (4.2 lb) approx
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Tripod mounting . . . . . standard 1/4 BSW bush

## Materials

All externally exposed components are produced from flame retardant materials

Outer camera case . . . . .	Radel <sup>®</sup> R-5100
Lens bezel, access panel . . . . .	Radel <sup>®</sup> R-5100 over-moulded in Santoprene <sup>®</sup> (60 Shore hardness)
Neck straps . . . . .	Nomex <sup>®</sup>
Side straps . . . . .	Nomex <sup>®</sup>



Photograph shows P4466 Argus<sup>®</sup>3 with spot temperature option fitted.

## POWER SUPPLY

Power is supplied from an integral battery pack.

Power consumption . . . . . 5 W approx, dependent upon options and detector choice

Battery . . . . . 6 V, 3600 mAh NiMH

Battery life . . . . . greater than 2.5 hours (approx.)

Alkaline primary cells . . . . . eight 1.5 V AA (LR6)

The remote control requires two 1.5 V AAA LR03.

## OUTPUTS

A NTSC video signal for connection by cable to a remote monitor is provided. This connection has a 75  $\Omega$  impedance and conforms to EIA RS-170 525-line/60Hz field standard. Connection is via a BNC socket located under the front access panel.

A data input/output socket is also provided under the front cover, conforming to RS232 standard. Using the PC software provided, the user can enable or disable the various features, set up the display and download captured images.

## ENVIRONMENTAL DATA

### Thermal Conditions

The camera is designed to operate for 1 hour minimum at 60 °C (140 °F). Higher temperatures will be tolerated for shorter periods.

### Sealing

The camera is sealed to withstand driving spray and short-term total immersion in water (IP 67).

### Drop

The camera has been designed to withstand impact from a height of 1 metre (39 inches).

### Storage

The camera may be stored for extended periods. It is recommended that for maximum effective operational life, the storage temperature is kept between -10 and +40 °C (14 to 104 °F) and the camera is retained in its dedicated transit case when not in use.

## OPTICAL DATA

### ASi Image Sensor

The P4466 Argus<sup>®</sup>3 camera uses an advanced micro-bolometer detector, customised to produce a high quality image.

Pixel count and pitch . . . . .	160 x 120 pixels 46.8 µm pitch
Integrated lens . . . . .	the lens and detector are supplied as a unit
Focal length . . . . .	8.5 mm
Maximum aperture . . . . .	f/1.0
Horizontal angle of view . . . . .	50°
Spectral response . . . . .	7 - 14 µm
Noise equivalent temperature difference . . . . .	0.1 °C

### Viewing

The thermal image is displayed on a 4-inch fully colourised LCD. The thermal image can be viewed in 8 different colourised settings:

1. Greyscale
2. Red spot
3. Soft red spot
4. Greenscale
5. Half colour
6. Full colour 1
7. Full colour 2
8. Full colour 3

### On-screen Graphics

P4466 Argus<sup>®</sup>3 provides a range of on-screen status icons: battery usage, ambient temperature, zoom and time/date. Where fitted, spot temperature and telemetry video transmission status and channel icons are also displayed.

Warning icons alert the user to camera overstress or give indication of camera operating status.

Users are given the option of uploading their own splash screen graphic or text in .bmp format. The splash screen is displayed each time the camera is switched on.

## REMOTE CONTROL

The camera is supplied with a remote control that allows the user to set up the camera and view captured images remotely. The full range of functionality is defined below:

- LCD brightness
- LCD colour
- LCD contrast
- Transmitter channel select/off (if transmitter option is fitted)
- Display colour choice (scroll through greyscale plus 7 colourised settings)
- Scroll through stored images and delete
- Black/White hot image
- Set-up time/date

## IMAGE CAPTURE

Up to 26 images can be captured and stored in the camera. These images can then be viewed or deleted using the remote control provided. Using the software provided, captured images can be downloaded to a suitable laptop/PC in \*.bmp format.

## OPTIONAL ENHANCEMENTS

Spot temperature: A spot temperature measurement facility is available on the P4466 Argus<sup>®</sup>3, offering a 3° field of measurement over a temperature range of 0 to 500 °C (32 to 1060 °F).

Video Transmission (dependent on market)\*: The availability of a video transmission system is dependent upon local regulations. In all cases the system is integral to the camera and utilises the camera battery.

The US market is offered a two-channel 300 mW system operating at 2400 MHz and approved to FCC Part 90.

The UK market is offered a single-channel 200 mW system operating at 1394 MHz and license exempt under MPT1349.

The European market is offered a range of single-channel systems. Local regulations vary from country to country; contact your local distributor for more information.

### Standard Accessories

- The following accessories are supplied with each camera:
- Rugged waterproof carry case
- A pair of rigid handles (alternative to side straps)
- Two rechargeable battery packs
- Two primary battery packs (see page 1)
- Neck strap
- Remote control
- Battery charger with vehicle adaptor and mains plug (US, UK, Europe)
- Argus<sup>®</sup>3 user manual and user software (minimum PC spec. Pentium<sup>®</sup> 200, 32 MB RAM, Windows<sup>®</sup> 95/98/NT/2000/XP).

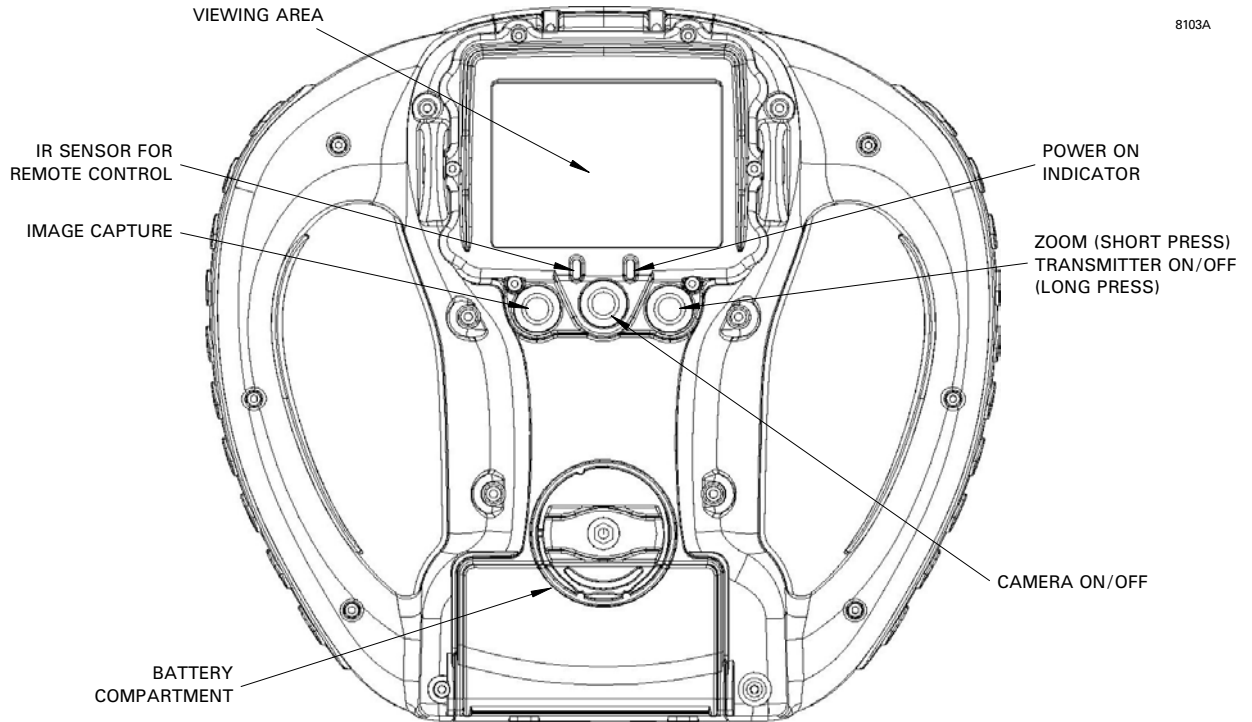
### Optional Accessories

- To enhance the use of the P4466 Argus<sup>®</sup>3, e2v technologies offers the following optional accessories:
- Video transmission receiving station (to suit approved transmitters)\*
- Quick access storage mount with automatic in-camera battery charging

### Spares Provision/Support

A range of parts is available to support end-users. These include external components such as lens bezel, access panel, handles, neck and side straps and batteries. For a full listing, contact your local distributor.

## REAR VIEW (with rigid handles fitted)



## WARRANTY

All Argus<sup>®</sup>3 cameras are supplied with a 24-month warranty as standard, with an option to extend to 5 years.

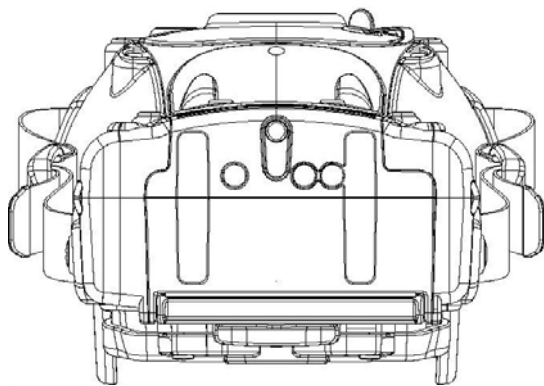
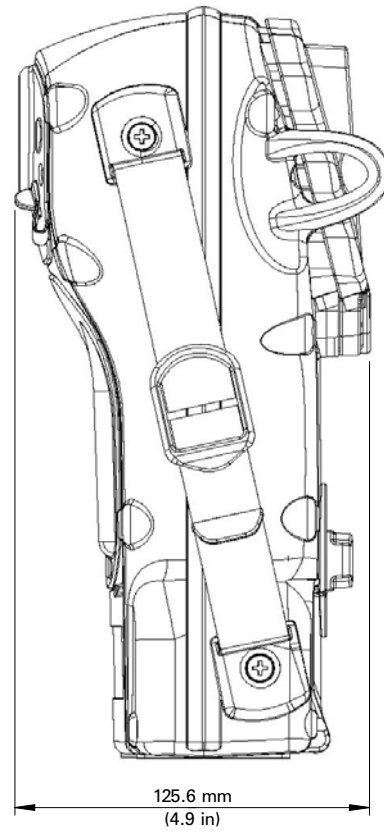
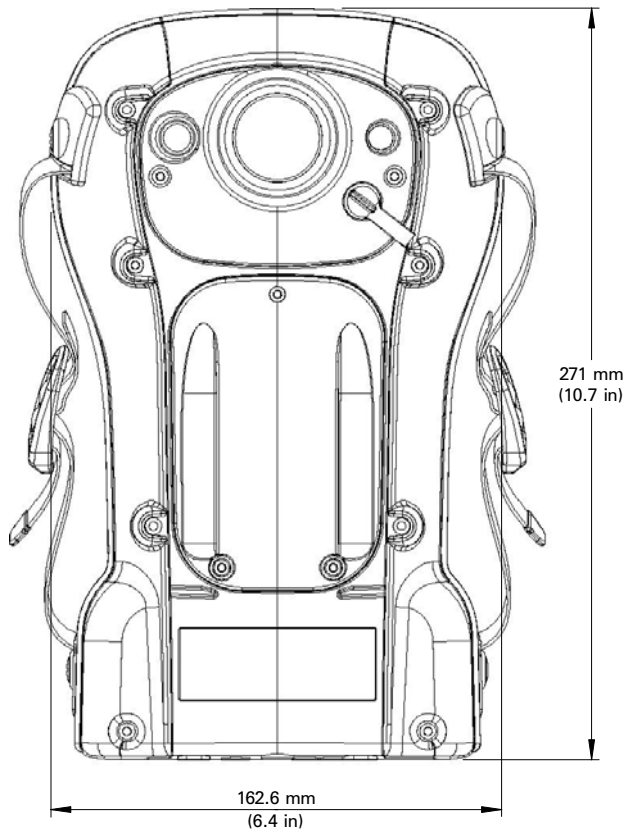
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\* only available in certain countries. Contact your distributor for further information.

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## OUTLINE (with standard side straps fitted)

8102A



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