

Argus™ 4



Thermal Imaging Camera

Argus™ 4 is the latest generation of Argus™ Thermal Imaging Camera (TIC0 from e2v technologies).

The Argus™ 4 has been designed with digital imaging technology for a sharper picture and uses the highly successful Amorphous Silicon (ASi) Microbolometer Detector that is used by many of the world's fire brigades.

The Argus™ 4 is a simple-to-operate, robust, self-contained camera, with fully automatic operation; no control or adjustment is required. The camera has been specifically designed to help firefighters to see through smoke, identify and rescue casualties and locate hot spots or the seat and spread of the fire. It has many further applications where temperatures require monitoring of equipment.

It also provides vision where light is unavailable.

CAMERA STANDARD FEATURES

The Argus™ 4 comes with the most advanced features available in any Thermal Imaging Camera. These include:

- Dynamic Scene Colourisation (DSC) – Colourises the thermal image to allow the firefighter to pinpoint the hottest areas within the fire scene.
- Direct Temperature Measurements (DTM) – Displays the temperature of objects within a defined area of the thermal scene.
- SceneSave™ Digital Image Capture – The Argus™ 4 can capture and store up to 100 images. These can then be viewed or deleted using the remote control supplied. Using the software provided, the captured images can be downloaded to a suitable laptop/PC and exported in *.bmp format.
- Tri-Mode Sensitivity – Microbolometer cameras have two modes of sensitivity, high and low, Argus™ 4 now has a third level of sensitivity, high scene temperatures to enable clear imagery at all temperatures.
- Customised Start-up Screen – Brigade logos or station names can be added to the start-up screen for asset tracking and/or personalisation of the camera.
- Ambient Temperature Measurement – A sensor fitted to the front of the camera, which measures the ambient temperature of the local environment. The temperature is displayed on the viewing screen.
- X2 Zoom – Allows the user to zoom in on the scene, from a distance, for improved investigation and identification of hot spots and dangers.
- Time and Date – The time and date is displayed at the top of the viewing screen.
- Remote Control – The Argus™ 4 is supplied with a remote control that allows the end user to adjust LCD settings, set the dynamic scene colourisation and set the time and date. Stored images can be reviewed and deleted.



Power for the Argus™ 4 is provided by an integral battery pack located on the top of the camera. The camera has a single on/off button with a delayed off operation to prevent accidental power-down during use.

The camera will display a start-up screen until a useable thermal image is produced.

The Argus™ 4 is constructed from high quality Radel®R-5100, which has been chosen for its strength, resistance to heat, water and impact. Protection from shock is provided by a combination of rugged components, optimum mechanical design and protective bumpers. The camera is sealed to allow short-term total immersion in water (IP67). The camera is supplied with side straps and a removable handle, which provides flexible operation and transfer between users.

No end-user maintenance is required other than recharging of batteries and post-use external cleaning with a soft cloth.

CAMERA STANDARD ACCESSORIES

The Argus™ 4 comes with the following standard accessories:

- Handle
- Soft Carry Case
- Side Straps
- Remote Control
- Two Rechargeable Battery Packs
- Battery Charger with mains plug (AUS,US, UK, Europe)
- Neck Strap
- USB Connection lead for PC/Laptop
- User Manual
- End-User software

WARRANTY AND SUPPORT

- The camera is supplied with a 24-month warranty as standard.
- Warranty can be extended for up to an additional three years at the time of purchase.

PAC FIRE AUSTRALIA will attempt to repair any camera within 48 hours of receipt at one of their service centres worldwide. Most repairs will be carried out in Australia.

- Loan camera available if required.

OPTIONAL CAMERA ACCESSORIES

The Argus™ 4 has a complementary range of accessories.

These are:

- **Truck Storage Mount and Battery Charger** – Provides secure storage with instant access for the camera and charging facilities for the battery pack. (Part # P7030TSMBC).
- **Transmitter Battery Pack** – Allows the transmission of the thermal image from the camera to other personnel outside the fire incident via a radio link. (Part # P7030TX).
- **Receiver Station and Kit** - The receiver station is a PC based system that allows the viewing of the thermal image transmitted from the camera. The receiver station is available as complete solution (PC and receiving card and antenna) or as a kit (receiving card and antenna). (Part # P7030RRS and P7030RKT).
- **External Power and Video Adapter** – A module to replace the battery pack to allow live digital video to be viewed and the camera externally powered. (Part # P7030HC).
- **Hard Carry Case** – An alternative to the soft carry case. Can be supplied with the camera using Part # P7030/N or as an after-sale accessory. (Part # P7030HC).
- **Mounting Bracket** – The Mounting Bracket provides a solution for the permanent fixing of the camera to any flat surface (Part # P7030MB).

CAMERA SPECIFICATION

OPTICAL DATA –

DETECTOR

Sensor Type	Uncooled Microbolometer
Sensor Material	Amorphous Silicon (ASi)
Resolution	160 x 120
Spectral Response	8 – 14 um
MDTD	<0.1°C
Dynamic Range	-40°C to 800°C (-40°F to 1480°F) using 3 ranges with auto-switching between ranges.
Refresh Rate	30Hz
Spot Temperature Range	-40°C to 800°C (-40°F to 1480°F)
Ambient Temperature Range	-15°C to 150°C (5°F to 300°F)

LENS

Lens Material	Germanium
Focal Length	6mm
Focal Distance	1m to infinity, optimised at 4m (3 feet to infinity, optimised at 13 feet)
Horizontal Aperture	f/1.0
Field Of View	50° horizontal

VIEWING

Display Type	Transflective, active matrix colour TFT
Display Size	90mm (3.5 inches)
Backlight	White LED

MECHANICAL DATA

Overall Dimensions	130mm x 185mm x 185mm
H x W x D	5.1 x 7.2 inch (nominal)
Including Handle	295mm x 185mm x 185mm
H x W x D	11.5 x 7.2 x 7.2 inch (nominal)
Weight without battery	< 1.2kg
Weight with battery	< 1.5kg
Weight with battery and handle	< 1.7kg

MATERIALS

Outer Camera Case	Radel® R-5100
Rear Bumper	Multiflex®
Front Bumper	Multiflex®
Neck Strap	Nomex®
Side Straps	Nomex®
Handle	Radel® R-5100 overmoulded in Santoprene®

PAC FIRE AUSTRALIA

Unit 1, 28 Burnside Road,
Hallmarc Business Park, YATALA QLD 4207

Phone 1300 73 1800

Fax: (07) 3441 7177

Email: sales@pacfire.com.au

Website: www.pacfire.com.au

MAR09

