

INTRODUCTION

The Argus® Security Camera (SC) is the latest generation of the highly successful Argus® Thermal Imaging Cameras (TIC) from e2v technologies.

The Argus® SC has been specifically designed to help Police, security and law enforcement officers to detect the heat signatures of people and objects. The camera can be used in conditions of zero visibility including complete darkness and smoke.

The Argus® SC offers a simple-to-operate configuration and is a robust, self-contained camera, with fully automatic operation. It is lightweight and ergonomic and capable of withstanding harsh environments.

The Argus® SC uses a high-resolution 320 x 240 pixel, Amorphous Silicon (ASi) Microbolometer Detector. It has been designed using advanced digital imaging technology for a sharper picture and provides superior performance.

CAMERA STANDARD FEATURES

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

- **Enhanced Dynamic Scene Colourisation (EDSC)**
Colourises the thermal image to allow the user to pinpoint the areas of interest within the surveillance scene.
- **Direct Temperature Measurement (DTM)**
Displays the temperature of objects within a defined area of the thermal scene.
- **SceneSave™ Digital Image Capture**
The Argus® SC can capture and store up to 100 images. These can then be viewed or deleted using the on screen menu. Using the software provided, the captured images can be downloaded to a suitable laptop/PC and exported in various formats.
- **Dimmable LCD Display**
The Argus® SC can instantly turn off the LCD backlight to prevent recognition.
- **Customisable Start-up Screen**
Police force logos or station names can be added to the start-up screen for asset tracking and/or personalisation of the camera.
- **X2/X4 Zoom**
Allows the user to zoom in on the scene, from a distance, for improved investigation, identification and surveillance of the scene.



- **Time and Date**
The time and date is displayed at the top of the viewing screen.
- **ON Screen Set-up Menu**
The Argus® SC allows the end user to adjust various camera settings and review and delete stored images.

Power for the Argus® SC 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® SC 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 that provide 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.

Whilst e2v technologies has taken care to ensure the accuracy of the information contained herein it accepts no responsibility for the consequences of any use thereof and also reserves the right to change the specification of goods without notice. e2v technologies accepts no liability beyond the set out in its standard conditions of sale in respect of infringement of third party patents arising from the use of tubes or other devices in accordance with information contained herein.

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CAMERA STANDARD ACCESSORIES

The Argus® SC comes with the following standard accessories:

- Soft carry case
- Side straps
- Two rechargeable battery packs
- Battery charger with mains plug (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.

e2v technologies will attempt to repair any camera within 48 hours of receipt at one of their service centres worldwide.

ORDER CODES

- **P7250** – Thermal Image Camera with 50° field of view lens.
- **P7225** – Thermal Image Camera with 24° field of view lens.

OPTIONAL CAMERA ACCESSORIES

The Argus® SC 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 Number 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 Number 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 Numbers P7030RRS and P7030RKT)
- **External Power and Video Adaptor**
A module to replace the battery pack to allow live digital video to be viewed and the camera externally powered.
(Part Number P7030EPVA)
- **Hard Carry Case**
An alternative to the soft carry case.
(Part Number P7030HC)
- **Mounting Bracket**
The Mounting Bracket provides a solution for the permanent fixing of the camera to any flat surface
(Part Number P7030MB)

CAMERA SPECIFICATION

Compliance Data

RFI/EMC	Emissions -	BS EN 61000-6-3:2007 FCC CFR-47 Subpart B Class B AUS/NZ 4251.1
	Immunity -	BS EN 61000-6-2:2005
Safety		IEC 60950-1 and related national standards
Vibration/Shock		BS EN 60721-3-2 Class 2M3.
Restriction of the use of Hazardous Substances in electrical and electronic equipment (RoHS)		All parts of the system are compliant with EU directive 2002/95/EC

Environmental Data

- Sealing - The camera is sealed to allow short-term immersion in water (IP67)
- Impact - The camera has been designed to withstand a drop from a height of 2 metres (78 inches)
- Vibration - The camera has been design to withstand transportation vibration defined by BS EN 60721-3-2 Class 2M3
- Storage - The camera can 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 and 104 °F) and the camera is retained in its carry case when not in use.

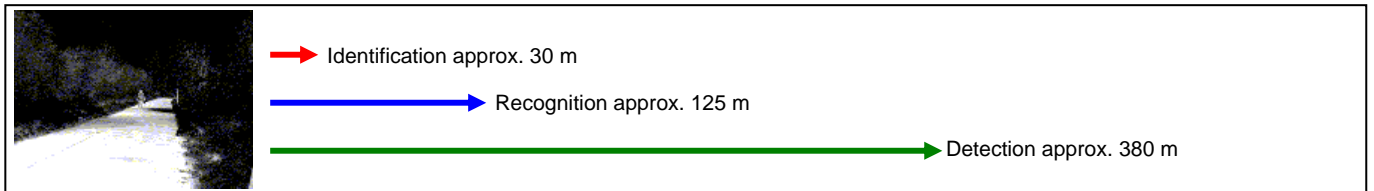
Optical Data

Detector

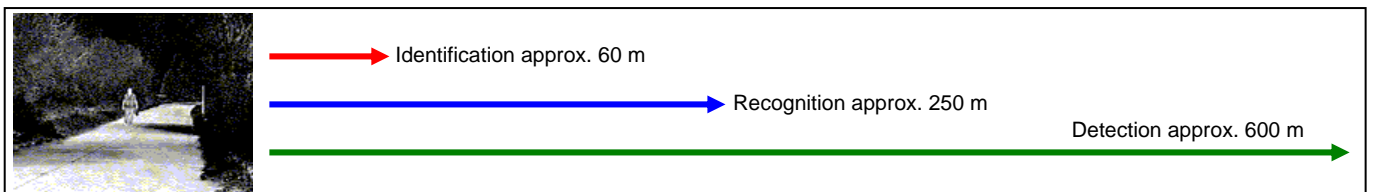
Sensor type -	Uncooled Microbolometer
Sensor material -	Amorphous Silicon (ASi)
Resolution -	320 x 240
Spectral response -	8 – 14 µm
MDTD -	< 0.05 °C
(Minimum Discernible Temperature Difference)	
Dynamic range -	-40 to +200 °C (-40 to +392 °F)
Refresh rate -	60 Hz
Spot temperature range -	-40 to +200 °C (-40 to +392 °F)

Range Performance

50° Field of View lens (P7250)



24° Field of View lens (P7225)



Lens

Lens material -	Germanium
Focal length -	8.5 mm (P7250) 19 mm (P7225)
Focal distance -	1 m to infinity, optimised at 4 m (3 feet to infinity, optimised at 13 feet)
Horizontal aperture -	f/1.0
Field of view -	50° horizontal (P7250) 24° horizontal (P7225)

Viewing

Display type -	Transflective, active matrix colour TFT
Display size -	90 mm (3.5 inches)
Backlight -	White LED

Mechanical Data

Overall dimensions	130 x 185 x 185 mm
(H x W x D) -	(5.1 x 7.2 x 7.2 inch) (nominal)

Weight	without battery - < 1.2 kg (2.6 pounds)
	with battery - < 1.5 kg (3.3 pounds)

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®

Electrical Data

Power supply	Power consumption - 3 W typical
	Start-up time - 5 seconds typical

RECHARGEABLE BATTERY AND CHARGER SPECIFICATION

Battery

- Type - Ni-MH Rechargeable Battery
- Capacity - 2300 mAh
- Battery life - 4 hours @ ambient temperature (22 °C, 72 °F)
- Charge time - 2 hours nominal
- Recharge cycles - 500 @ 80% capacity
- Length - 125 mm (4.8 inches) nominal
- Width - 55 mm (2.2 inches) nominal
- Height - 50 mm (2 inches) nominal
- Net weight - 220 g (0.1 pounds) nominal
- Charging temperature - 0 to +40 °C (32 to 104 °F)
- Sealing - IP56

Charger

- Power requirements - 100 – 240 VAC, 50/60 Hz, 1 A max
- Length - 105 mm (4 inches) nominal
- Width - 65 mm (2.5 inches) nominal
- Height - 35 mm (1.4 inches) nominal
- Net weight - 220 g (0.1 pounds) nominal
- Operating temperature - 0 to +40 °C (32 to 104 °F)
- Protection - Over-voltage and over-temperature protection built into the charger and battery.
- Compliance - EMC Directive 89/336/EEC
Low Voltage Directive 73/23/EEC
BS EN60335 Part 1 and Part 2-29
- RoHS - All parts of the system are compliant with EU directive 2002/95/EC
- Sealing - IP20

Charging Shoe

- Length - 150 mm (5.8 inches) nominal
- Width - 70 mm (2.75 inches) nominal
- Height - 50 mm (2 inches) nominal
- Net weight - 200 g (0.1 pounds)
- Operating temperature - 0 to +40 °C (32 to 104 °F)
- Sealing - IP20