

Mi-TIC



The Argus® Mi-TIC is the world's smallest high resolution thermal imager for fire fighting applications. The camera provides a crystal clear image with a superb dynamic range: you can clearly view extremely high temperatures without whiteout, and at the same time still see very low temperature objects, which is ideal for casualty searches.

Every Argus® Mi-TIC is supplied with a unique dual use desktop/ in-truck charger station which securely retains and charges both the thermal imager and a spare battery. The charger stations can be daisy-chained together, up to a maximum of 6 units.

PERSONAL

Weighing approximately 750g (26 oz) the Argus® Mi-TIC is a small format thermal imager that can be easily and comfortably held in the palm of your hand. Unlike many thermal imagers, the Argus® Mi-TIC design allows it to be worn in multiple ways – in the hand, inside a pocket, clipped outside a pocket, clipped to a lanyard or hung around the neck.

SIMPLE

With a thumb operated green on/off button and superb start up time of 5 seconds, the Argus® Mi-TIC is simple to use.

SAFE

The use of Lithium Iron Phosphate technology ensures the Argus® Mi-TIC delivers 2 hours of battery life over 1,000s of cycles. They are inherently safe due to the use of patented nanophosphate® technology.

CAMERA STANDARD FEATURES

The Argus® Mi-TIC comes with the most advanced features available in any Thermal Imaging Camera. **These include:**

Direct Temperature Measurement (DTM)	User Replaceable Germanium window – no need to send camera back to the factory (Order code: ARG_MI_RW)
Tri-Mode Sensitivity	No PC Software required for image and video download – when the camera is docked, it is recognised as a removable device, like a USB memory stick
Customisable start-up screen	Picatinny rail – for mounting compatible accessories
Toggle between application specific colour modes* <ul style="list-style-type: none">• Fire Mode• Overhaul/Search Mode	
Digital Zoom*	

* 3-button variants only

CAMERA STANDARD ACCESSORIES

The Argus® Mi-TIC comes with the following accessories as standard:

Two Argus® Mi-TIC Lithium Iron Phosphate Battery Packs. (Standard) (Order code: ARG_MI_BLPS)	Picatinny rail accessory mount. (Order code: ARG_MI_RAIL)
Truck/Desktop Charger Dock with mains plug and universal mounting plate. (US, UK, Europe, Aus and South America) (Order code: ARG_MI_CS)	USB Connection Lead for connecting dock to PC / Laptop. (Order code: ARG_MI_USB)
Retractable Lanyard. (Order code: ARG_MI_RL)	Pocket Clip (Order code: ARG_MI_PCLIP)
	Quick Start Guide

CAMERA OPTIONAL ACCESSORIES

Argus® Mi-TIC Video Pack - enables image capture (1000 images), video recording (8 hours) with 'Black Box' feature (Order code: ARG_MI_IV)	Argus® Mi-TIC Lithium Iron Phosphate Battery (High capacity). (Order code: ARG_MI_BLPL)
AA Battery Pack. (Order code: ARG_MI_BAA)	Argus® Mi-TIC Sunshroud. (Order code: ARG_MI_SS)
Argus® Mi-TIC Black Hard Case. (Order code: ARG_MI_BHC)	Argus® Soft Carry Case (Order code: (P7030SC)
	Argus® Neck Strap (Order code: (P7030NS)

Please refer to the Argus website for details.

TO BOOK A DEMONSTRATION OR FIND OUT MORE GO TO:

argusdirect.com

CAMERA ORDER CODES

Code	Resolution	Buttons	Frame rate
MI-160-1	160x120	1	30Hz
MI-169-1	160x120	1	9Hz
MI-160-3	160x120	3	30Hz
MI-169-3	160x120	3	9Hz
MI-320-1	320x240	1	30Hz
MI-329-1	320x240	1	9Hz
MI-320-3	320x240	3	30Hz
MI-329-3	320x240	3	9Hz

WARRANTY

24-month warranty as standard (Rechargeable battery pack excluded - Warranty for 12 months).

Warranty can be extended for up to an additional three years at the time of purchase (exclusions apply).

ENVIRONMENTAL DATA

Thermal conditions	The camera has been designed to operate: <ul style="list-style-type: none"> • continuously between -20°C (-4°F) and +85°C (185°F) or • 150°C (300°F) for 15 minutes • 260°C (500°F) for 7 minutes
Sealing	IP67, will withstand short-term immersion in water
Impact	The camera will withstand a drop from a height of 2m (78 inches) onto concrete
Storage	It is recommended that for maximum effective operational life, the storage temperature is kept between -20°C (-4°F) and +40°C (104°F)

OPTICAL DATA

Detector

Sensor type	Un-cooled Microbolometer
Sensor material	Amorphous Silicon (ASi)
Resolution	MI-160 : 160 x 120px; MI-320 : 384 x 288px
Pixel size	25µ
Spectral response	8 – 14µm
MDTD	70 mK (0.07°C) typical (Minimum Discernible Temperature Difference)
Dynamic range	-40°C to 1100°C (-40°F to 2000°F)
Refresh rate	120Hz for 160x120 sensor, 60 Hz for 384x288 sensor
Direct Temperature Measurement (DTM)	-40°C to 1100°C (-40°F to 2000°F)

Lens

Lens material	Germanium
Focal length	1m to infinity, optimised at 4m (3 ft to infinity, optimised at 13 ft)
Aperture	f/1.0
Field of view	50° horizontal, 37.5° vertical

Display

Type	High grade, Industrial, colour TFT active matrix LCD
Size	69mm (2.7 inches)
Pixel format	QVGA 320 x 240, (each pixel RGB format, total pixels 230,400 pixels)
Video input	Sensor synchronised direct digital drive
Backlight	400cd/m ²

MECHANICAL DATA

Camera dims (H x W x D)	203mm x 96mm x 85mm (without Picatinny rail)
Camera weight	600g (21 oz) without battery 765g (27 oz) with std battery 855g (30 oz) with high capacity battery
Battery dims (H x W x D)	87mm x 76mm x 28mm (std battery) 87mm x 76mm x 35mm (high capacity battery)
Battery weight	165g (6oz) (std battery) 255g (9oz) (high capacity battery)
Charger dims (H x W x D)	167mm x 112mm x 120mm
Charger weight	550g (1lb and 3 oz)
Main camera body	Radel®R-5100 and Santoprene®
LCD window	Ultrason® E 2010 HC
LCD bumper	Santoprene®
GE Window collar	Radel®R-5100 and Santoprene®
Lens window	Germanium (2mm thick) with durable coating

ELECTRICAL DATA

Power consumption	<3 W typical
Start-up time	5 seconds typical
Battery type	Lithium Iron Phosphate Rechargeable Battery
Battery capacity	1100 mAh, 6.6V (std battery); 2500mAh, 6.6V (high capacity battery)
Std Battery life	In excess of 2hrs @ ambient temperature (22°C, 72°F)
Std Battery charge time	Less than 2 hours
High Capacity Battery Life	In excess of 5hrs @ ambient temperature (22°C, 72°F)
High Cap, Battery charge time	Less than 4.5 hours
Battery recharge cycles	Over 1000 cycles
Battery sealing	IP67
Battery charging temp.	5°C to 40°C (41°F to 104°F)
Charger input voltage	11V – 30V DC (12V and 24V vehicle systems)
Charger operating temp.	0°C to 40°C (32°F to 104°F)

COMPLIANCE DATA

Safety	IEC 60950-1 and related national standards (T _{amb} +80°C max) ANSI/ISA 12.12.01:2007 Class I, Division 2, Groups C, D T4. -25°C (-13°F) to +70°C (158°F)
Emissions RFI/EMC	BS EN 61000-6-3:2007 + A1:2011, BS EN 50498:2010, ICES-003(2012), FCC CFR-47 Subpart B, AUS/NZ 4251.1
Immunity	BS EN 61000-6-2:2005, BS EN 50498:2010
Vibration/Shock	BS EN 60721-3-2 Class 2M3
RoHS	All parts of the system are compliant with EU directive 2011/65/EC

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.

e2v technologies (uk) limited, Waterhouse Lane, Chelmsford, Essex CM1 2QU United Kingdom
Holding Company: e2v technologies plc Telephone: +44 (0)1245 493493 Facsimile: +44 (0)1245 492492 Contact e2v by e-mail: enquiries@e2v.com or visit www.e2v.com for global sales and operations centres. © e2v technologies (uk) limited 2013