

SAFETY AND
INNOVATION



argus®

thermal imaging from Avon Protection

Mi-TIC E™



The argus® Mi-TIC E is the world's smallest high resolution thermal imager for fire fighting applications. The camera provides a crystal clear image with dynamic range up to 760°C (1400°F) and at the same time see very low temperature objects, which is ideal for casualty searches.

Every argus® Mi-TIC E 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 E 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 E 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 E is simple to use.

SAFE

The use of Lithium Iron Phosphate technology ensures the argus® Mi-TIC E 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 E comes with the most advanced features available in any Thermal Imaging Camera. **These include:**

Direct Temperature Measurement (DTM)	Image Capture (1000 images)*
Tri-Mode Sensitivity	Video Capture (8 hours) including 'Black Box' recording
Customisable start-up screen	Image Freeze*
Firefighting applications modes* <ul style="list-style-type: none">• Fire mode• Overhaul• Size Up• Inspection	User Replaceable Germanium window (Order code: ARG_MI_RWS)
Search and Rescue application modes* <ul style="list-style-type: none">• White Hot• Heat Seeker Blue	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
X2 and X4 Digital Zoom*	

* 3-button variants only

CAMERA STANDARD ACCESSORIES

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

Two argus® Mi-TIC Lithium Iron Phosphate Battery Packs. (Yellow) (Order code: ARG_MI_BLPYN)	Retractable Lanyard. (Order code: ARG_MI_RL)
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)
	Pocket Clip (Order code: ARG_MI_PCLIP)
	Quick Start Guide

CAMERA OPTIONAL ACCESSORIES

argus® Mi-TIC Black Hard Case. (Order code: ARG_MI_BHC)	argus® Soft Carry Case (Order code: P7030SC)
argus® Mi-TIC Sunshroud. (Order code: ARG_MI_SS)	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-320-1-E	320x240	1	30Hz
MI-329-1-E	320x240	1	9Hz
MI-320-3-E	320x240	3	30Hz
MI-329-3-E	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 5 minutes
Sealing	IP67, will withstand 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	384 x 288px
Pixel size	25µm
Spectral response	7.5 – 14µm
MDTD (Full camera system sensitivity)	70 mK (0.07°C) typical (Minimum Discernible Temperature Difference)
NETD (Sensor sensitivity)	<50mK (<0.05°C)
Dynamic range	-40°C to 760°C (-40°F to 1400°F)
Refresh rate	60 Hz
Direct Temperature Measurement (DTM)	-40°C to 760°C (-40°F to 1400°F)
Lens	
Lens material	Germanium Composite
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/m2

MECHANICAL DATA

Camera dims (H x W x D)	203mm x 96mm x 71mm
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 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

Performance	NFPA 1801 - 2013 Standard on Thermal Imagers for Fire Services
Safety	IEC 60950-1 and related national standards (Tamb +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

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Avon Protection, a trading name of Avon Polymer Products Limited, Hampton Park West, Melksham, SN12 6NB, United Kingdom

T: +44 (0) 1225 896705 E: argus@avon-protection.com© Avon Protection 2015