INTRODUCTION

The Mi-TIC S is part of the argus range of thermal imaging cameras and the world’s smallest thermal imager to feature a large format, high resolution display for advanced fire fighting applications. The camera provides a crystal clear image with a superb dynamic range: you can clearly view extremely high temperatures up to 1100°C (2000°F) and at the same time see very low temperature objects, which is ideal for casualty searches.

Every Mi-TIC S 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 870g (31oz) the Mi-TIC S is a small format thermal imager that can be easily and comfortably held in the palm of your hand. Unlike many thermal imagers, the Mi-TIC S 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 Mi-TIC S is simple to use.

SAFE

The argus Mi-TIC S has Class I, Division 2 and Class II, Division 2 Non Incendive certifications. The use of Lithium Iron Phosphate technology ensures the Mi-TIC S delivers in excess of 3 hours of battery life over 2,000 plus charge cycles. They are inherently safe due to the use of patented nanophosphate* technology.

CAMERA STANDARD ACCESSORIES

- 3.5” LCD Display
- Direct Temperature Measurement (DTM)
- Tri-Mode Sensitivity
- Customisable start-up screen
- Firefighting applications modes:
  - Fire mode
  - Overhaul
  - Size Up
  - Inspection
- Search and Rescue application modes:
  - White Hot
  - Heat Seeker Blue
  - Heat Seeker Cold Seeker
- X2 and X4 Digital Zoom
- Laser Pointer
- Electronic Compass
- Image Capture (1000 images)
- Video Capture (16 hours) including ‘Black Box’ recording
- Image Freeze
- User Replaceable Germanium window
- 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

CAMERA STANDARD FEATURES

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

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CAMERA OPTIONAL ACCESSORIES

- USB Connection Lead for connecting dock to PC / Laptop.
- Pocket Clip
- Quick Start Guide

www.avon-protection.com
CAMERA ORDER CODES

<table>
<thead>
<tr>
<th>Code</th>
<th>Resolution</th>
<th>Buttons</th>
<th>Frame rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>MI-TIC-S-3</td>
<td>320x240</td>
<td>3</td>
<td>30Hz</td>
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</tbody>
</table>

WARRANTY

5 year Camera Warranty
5 year Battery Warranty
10 year Focusing Lens and Sensor Warranty

ENVIRONMENTAL DATA

Thermal conditions
- The camera has been designed to operate:
  • 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)

MECHANICAL DATA

Camera dims (H x W x D)
- 216mm x 110mm x 82mm (8½ x 4½ x 3¼ inches)

Camera weight
- 705g (25oz) without battery
- 870g (31oz) with standard battery
- 960g (34oz) with high capacity battery

Battery dims (H x W x D)
- 87mm x 76mm x 28mm (standard battery)
- 87mm x 76mm x 35mm (high capacity battery)

Battery weight
- 165g (6oz) (standard battery)
- 255g (9oz) (high capacity battery)

Charger dims (H x W x D)
- 167mm x 112mm x 120mm

Charger weight
- 550g (1lb 3oz)

Lenses
- 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

OPTICAL DATA

Detector
- Sensor type: Un-cooled Microbolometer
- Sensor material: Amorphous Silicon (ASi)
- Resolution: 384 x 288px
- Pixel size: 17μm
- Spectral response: 7.5 – 14μm
- MTDT (Full camera system sensitivity): 50mK (0.05°C) typical (Minimum Discernible Temperature Difference)
- NETD (Sensor sensitivity): <50mK (<0.05°C)
- Dynamic range: -40°C to 1100°C (-40°F to 2000°F)
- Refresh rate: 60Hz
- Direct Temperature Measurement (DTM): -40°C to 1100°C (-40°F to 2000°F)

Lens
- Lens material: Germanium Composite
- Focal length: 1m to infinity, optimised at 4m (3ft to infinity, optimised at 13ft)
- Aperture: f/1.0
- Field of view: 50° horizontal, 37.5° vertical, 62°diagonal
- Display
  - Type: High grade, Industrial, colour TFT active matrix LCD
  - Size: 90mm (3.5 inches)
  - Pixel format: QVGA 320 x 240, (each pixel RGB format, total pixels 230,400 pixels)
  - Video input: Sensor synchronised direct digital drive
  - Backlight: 350 cd/m²

ELECTRICAL DATA

Power consumption
- <3 W typical

Start-up time
- 5 seconds typical

Battery type
- Lithium Iron Phosphate Rechargeable Battery

Battery capacity
- 1500mAh, 6.6V (standard battery)
- 2500mAh, 6.6V (high capacity battery)

Std Battery life
- In excess of 3 hours @ ambient temperature (22°C, 72°F)

Std Battery charge time
- Less than 3 hours

High Capacity Battery Life
- In excess of 5 hours @ ambient temperature (22°C, 72°F)

High Cap, Battery charge time
- Less than 4.5 hours

Battery recharge cycles
- Over 2000 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 1801:2018 Standard on Thermal Imagers for the Fire Service

Safety
- IEC 62368-1:2014 and related national standards
- ANSI/ISA 12.12.01:2015 Class I, Div 2, Groups C, D T4; Class II, Div 2 Groups E, G T4

Emissions
- EN 55032:2015, Class A
- EN 54098:2010
- FCC CFR 47 subpart 15b, ICES 003:2017
- AUS/NZ 4251.1

Immunity
- EN 55103-2:2009

Vibration/Shock
- BS EN 60721-3-2 Class 2M3

RoHS
- All parts of the system are compliant with EU directive 2011/65/EC

Laser