The Mi-TIC 320 is part of the argus range of thermal imaging cameras and is the world’s smallest NFPA 1801 certified 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 Mi-TIC 320 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 (26oz) the Mi-TIC 320 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 320 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 320 is simple to use.

**SAFE**

The Mi-TIC 320 has Class I, Division 2 and Class II, Division 2 Non Incendive certifications. The use of Lithium Iron Phosphate technology ensures the Mi-TIC 320 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.
**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 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)

**Mechanical Data**

**Camera dims (H x W x D)**
- 203mm x 96mm x 71mm (8 x 3 3/4 x 2 13/16 inches) (without Picatinny rail)

**Camera weight**
- 580g (1lb 4oz) without battery
- 755g (1lb 11oz) with standard battery
- 835g (1lb 13oz) with high capacity battery

**Battery dims (H x W x D)**
- Standard battery: 88mm x 76mm x 27mm (3 7/16 x 3 x 1 1/8 inches)
- High capacity battery: 88mm x 76mm x 35mm (3 7/16 x 3 x 1 3/8 inches)

**Battery weight**
- Standard battery: 165g (6oz)
- High capacity battery: 255g (9oz)

**Charger dims (H x W x D)**
- 167mm x 112mm x 120mm (6 9/16 x 4 7/16 x 4 1/2 inches)

**Charger weight**
- 550g (1lb 3oz)

**Emission**
- RFI/EMC: EN 54098:2010
- FCC CFR 47 subpart 15b, ICES 003:2017
- AUS/NZ 4251.1

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

**Electrical Data**

**Power consumption**
- <3 W typical

**Start-up time**
- 5 seconds typical

**Battery type**
- Lithium Iron Phosphate Rechargeable Battery

**Battery capacity**
- Standard battery: 1500 mAh, 6.6V
- High capacity battery: 2500mAh, 6.6V

**Battery life**
- In excess of 3 hours @ ambient temperature (22°C, 72°F)
- In excess of 5 hours @ ambient temperature (22°C, 72°F)

**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)

**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

**MDTD (Full camera system sensitivity)**
- 60mK (0.06°C) typical

**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

**Video format**
- QVGA 320 x 240, (each pixel RGB format, total pixels 230,400 pixels)

**Video input**
- Sensor synchronised direct digital drive

**Backlight**
- 400cd/m²

**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 F, 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