

argus™
LITE **4**



The Argus4 LITE + DTM Option has all the features of the Argus4 LITE, which include

- Tri-Mode Sensitivity for increased temperature range performance
- Color battery level indicator and User replaceable external fittings

Plus the additional feature of Direct Temperature Measurement (DTM). Displays both the temperature of objects within a defined area of the thermal scene and also the ambient temperature of the environment using a sensor mounted on the front of the camera

The Argus4 LITE + DTM P7030/LT/S is a simple to operate, robust, self-contained camera, which has fully automatic operation; no control or adjustment, is required in use. The camera has been specifically designed to help firefighters to see through smoke, identify and rescue casualties and locate hot spots or the seat and spread of the fire.

The Argus4 LITE 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).

No end-user maintenance is required other than recharging of batteries and post-use external cleaning with a soft cloth. Power for the Argus4 LITE 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 usable thermal image is produced.

Plus these standards accessories

- Soft carry bag
- Side straps
- One rechargeable battery
- AC or DC battery charger
- Operating instructions

OPTIONAL FEATURES

The Argus4 LITE can be supplied with the same advanced features available on the standard Argus4. These features include:

Dynamic Scene Colorization. (DSC) Colorizes the thermal image to allow the firefighter to pinpoint the hottest areas within the fire scene and is set up by the use of a supplied remote control.

The above feature can be supplied with the camera at time of purchase or added as an after sales upgrade.

WARRANTY

- The camera is supplied with a 2-year warranty as standard.
- Warranty can be extended for up to three years at time of purchase.

CONFIGURATION

Camera Order Code
ArgusTM4Lite + DTM Option P7030/LT/S

Optional Accessories Order Code

Station Battery Charger P7030BC and P7030CS
Truck Battery Charger P7030TBC
Truck Storage Mount P7030TSM
Truck Storage Mount and
Battery Charger P7030TSMBC
Rechargeable Battery Pack P7030R
Handle P7030HA
Neck Strap P7030NS
Retractable Lanyard P7030RL
Hard Carry Case P7030HC

CAMERA SPECIFICATION

Compliance Data

RFI/EMC Conducted
Emissions - BS EN 61000-6-3:2001 Class B FCC CFR-47 Part 15
Radiated Emissions - BS EN 61000-6-3:2001 Class B FCC CFR-47 Part 15
Electrostatic Discharge - BS EN 61000-6-1:2001 Class B
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

Thermal conditions - The camera has been designed to operate for:

- 45 minutes at 80 °C (176 °F)
- 15 minutes at 150 °C (300 °F)
- 7 minutes at 260 °C (500 °F)

- Minimum operating temperature is $-10\text{ }^{\circ}\text{C}$ ($14\text{ }^{\circ}\text{F}$)

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 meters (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 $-10\text{ }^{\circ}\text{C}$ and $+40\text{ }^{\circ}\text{C}$ ($14\text{ }^{\circ}\text{F}$ and $104\text{ }^{\circ}\text{F}$) 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 - 160×120

Spectral response - $7 - 14\text{ }\mu\text{m}$

MDTD - (Minimum Discernable Temp Difference) $< 0.1\text{ }^{\circ}\text{C}$

Dynamic range - $-40\text{ }^{\circ}\text{C}$ to $800\text{ }^{\circ}\text{C}$ ($-40\text{ }^{\circ}\text{F}$ to $1480\text{ }^{\circ}\text{F}$) using 3 ranges with auto-switching between ranges.

Refresh rate - 30 Hz

Spot temperature range - $-40\text{ }^{\circ}\text{C}$ to $800\text{ }^{\circ}\text{C}$ ($-40\text{ }^{\circ}\text{F}$ to $1480\text{ }^{\circ}\text{F}$)

Ambient temperature range - $-15\text{ }^{\circ}\text{C}$ to $150\text{ }^{\circ}\text{C}$ ($5\text{ }^{\circ}\text{F}$ to $300\text{ }^{\circ}\text{F}$)

Lens

Lens material - Germanium

Focal length - 6 mm

Focal distance - 1 m to infinity, optimized at 4 m (3 feet to infinity, optimized at 13 feet)

Horizontal aperture - f/1.0

Field of view - 50° horizontal

Viewing

Display type - Transflective, active matrix color TFT

Display size - 90 mm (3.5 inches)

Backlight - White LED

Mechanical Data

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

Weight without battery - $< 1.2\text{ kg}$ (2.6 pounds)

with battery - $< 1.5\text{ kg}$ (3.3 pounds)

Materials

Outer camera case - Radel®R-5100

Rear bumper - Multiflex®

Front bumper - Multiflex®

Neck strap - Nomex®

Side straps - Nomex®

Electrical Data

Power Supply

Power consumption - 3 W typical

Start-up time - <5 seconds

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 °C – 40 °C (32 °F – 104 °F) 65 °C (150 °F) can be tolerated

Sealing - IP56