

# MIDAS 320L

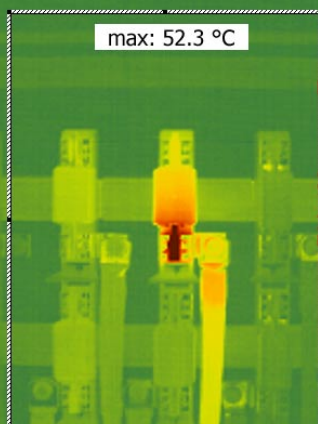
## Low-Cost, High-Performance IR Camera



- Fully radiometric capabilities with 320 × 240 pixel array image – not a 1/4 size (160 × 120)
- Optional macro add-on lens or wide-angle lens
- PYROSOFT analysis and report software
- Touch screen menu control on TFT-LCD display
- Displays images in real-time
- Operates like a point-and-shoot digital camera
- Operates with 6 AA rechargeable batteries
- Weighs less than 1.3 kg with batteries
- Transfers images to a PC using USB 2.0
- 2 years warranty, Made in Germany
- US-government export license not required

The **MIDAS** thermal imaging camera is an extremely light-weight, high-performance handheld IR camera offering capabilities normally found in models costing much more. It measures the infrared radiation emitted by the target surface and converts this radiation into a two-dimensional image relating to the temperature distribution at the target surface. This temperature distribution can then be viewed in full color or grey-scale through the TFT-LCD display or viewfinder which is located on the back of the camera.

This **radiometric camera** is ergonomically designed for comfortable one-handed point-and-shoot operation using a single button located on the top



of the camera. The on-board software provides an intuitive menu system which can be accessed through the touch screen TFT-LCD display.

Completely self-contained in a splash-proof plastic case, it is battery operated, uses advanced uncooled UFPA **microbolometer technology**, and stores images and data to an internal flash memory card. Images and image data can then be transferred to an external device using USB 2.0.

The provided **PC software PYROSOFT** allows a subsequent analysis of offline transferred images and displays images in real-time.

# MIDAS 320L

## Low-Cost, High-Performance IR Camera

<b>Temperature Range</b>	Range 1: -20 °C to 120 °C, Range 2: 0 °C to 500 °C (optional 100 °C to 900 °C)
<b>Measurement Uncertainty<sup>1</sup></b>	2 K (measured temperature < 100 °C) or 2 % of the measured value
<b>Field of View</b>	25° (H) × 19° (V)
<b>Focus Range</b>	30 cm to infinity
<b>Instantaneous FOV/Spatial Resolution</b>	1.4 mrad
<b>Optional Lenses</b>	Macro add-on lens 80 μm, wide-angle lens 50° (H) × 39° (V)
<b>Image Update Rate</b>	30 frames per second
<b>Sensitivity/NETD</b>	<0.08 K (30 °C, range 1)
<b>Detector</b>	320 × 240 radiometric uncooled microbolometer
<b>Spectral Range</b>	8 μm to 14 μm
<b>Emissivity Control</b>	0.2 to 1.0 in 0.01 steps for entire picture
<b>Alarm</b>	Upper or Lower
<b>File Format</b>	16 bit
<b>Display Color</b>	Color, greyscale (positive or negative), threshold display (2 thresholds are adjustable)
<b>Manual Functions</b>	Focusing
<b>Display Types</b>	3.9" Touch screen TFT LCD display, viewfinder
<b>Image Processing Function</b>	Point temperature and emissivity correction
<b>Data Display</b>	Point temperature, range, emissivity, time, date and color bar
<b>Digital Output/Communication</b>	USB 2.0
<b>Image Storage Media</b>	24 MB on board flash memory (126 images)
<b>Operating Temperature</b>	-10 °C to 50 °C
<b>Storage Temperature</b>	-20 °C to 70 °C
<b>Voltage Input</b>	12 V DC (external)
<b>Power Requirements</b>	6 AA batteries (battery holder included)
<b>Camera Dimensions</b>	170 mm (W) × 100 mm (H) × 95 mm (D)
<b>Camera Weight</b>	1.3 kg (with batteries)
<b>Standard Accessories</b>	6 AA rechargeable batteries with 2 holders, AC charger for batteries, AC adapter, USB interface cable, shippable carrying case, PC software PYROSOFT, shoulder strap

<sup>1</sup> Specification for blackbody reference, ambient temperature 25 °C

DIAS reserves the right to change specifications to reflect the latest changes in technology and improvements at any time without notice. These changes will be reflected in subsequent editions of our literature when warranted. December 2006.

