



More Precision

thermo**IMAGER** TIM // Compact thermal imaging cameras





thermoIMAGER TIM LightWeight

Extra light thermoIMAGER mini PC for flight applications

- Total weight 380g incl. camera
- Optical resolution: 382 x 288 pixels
- "Record button" on the camera housing
- Miniature PC for TIM 4xx standalone mode
- Supports a frame rate of up to 70Hz
- Simultaneous 20Hz video signal generation in parallel to 35Hz radiometric recording on the module
- Additional user software can be installed
- Processor: Intel® Atom™ Z530 @ 1.6GHz 2GB SSD, 1GB RAM
- Ports: 2x USB 2.0, 1x mini USB in slave mode, video, Gigabit Ethernet, microSD card (up to 32GB)
- Extensive supply voltage range: 8 - 48VDC or Power over Ethernet (PoE)
- Low power consumption (max. 12W)

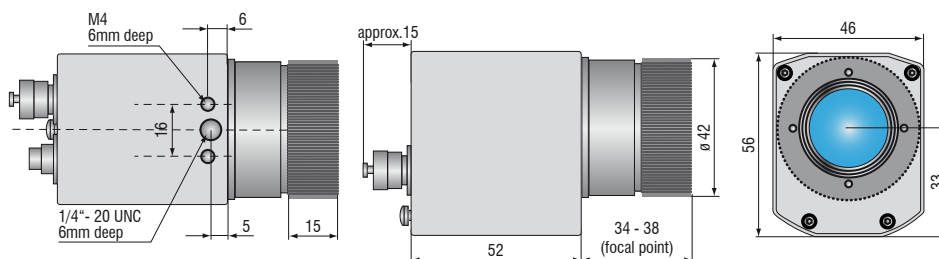


Photovoltaic thermography from the air

The 380-gramme thermal imaging camera can be mounted to a quadcopter to carry out defect analysis on solar cells.



Temperature monitoring for building thermography



Model	TIM LightWeight	
Optical resolution	382 x 288 pixels	
Temperature ranges	-20°C to 900°C	
Spectral range	7.5 to 13µm	
System accuracy	±2°C or ±2%, whichever is greater	
Lens	62° FOV (38° FOV option)	
Ambient temperature	0°C to 50°C	
Storage temperature	-20°C to 50°C	
Relative humidity	10 to 95% (non-condensing)	
Vibration	IEC-2-6: 3G, 11 - 200Hz, each axis	
Shock	IEC-2-27: 50G, 11ms, each axis	
Dimensions	TIM camera	46 x 56 x 90mm
	Miniature PC	112 x 58 x 54mm
Weight	380g (TIM camera + miniature PC)	
Operating system	Windows XP Professional	
Power supply	8...48 VDC or Power over Ethernet (PoE/ 1000BASE-T)	
Power consumption	9.5W (+ additional 2.5W for TIM camera)	
Cooling	Active with integrated fan	
Board	COM Express® mini embedded board	
Processor	Intel® Atom™ Z530/ 1.6GHz	
Hard disc drive	4GB SSD	
RAM	1GB (DDR2, 533MHz)	
Ports	2x USB 2.0, 1x mini USB 2.0 (slave mode), TV out, Ethernet (Gigabit Ethernet)	
Extensions	microSDHC card (up to 32GB)	
Additional functions	Remote control recording start and stop via switch on camera, 6 status LEDs	

PC requirements: minimum 1.5GHz, 1GB RAM, Windows XP SP 2 or Windows 7



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Scope of supply

TIM 400/450

- TIM process camera
incl. a selectable lens
- Operation manual
- USB cable 1m
- Software for real-time processing
and analysing thermal images
- Tripod mount
- PIF cable 1m
- Aluminium case

High performance sensors made by Micro-Epsilon



Sensors and systems for displacement and position



Sensors and measurement devices for non-contact temperature measurement



2D/3D profile sensors (laser scanner)



Optical micrometers, fibre optic sensors and fibre optics



Colour recognition sensors, LED analyzers and colour online spectrometer



Measurement and inspection systems

