



# More Precision

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



**thermoIMAGER TIM NetPCQ****PC solution for thermoIMAGER TIM applications**

TIM NetPCQ is a professional, embedded industrial PC solution with passive cooling (fanless) for thermoIMAGER applications and is suitable for top hat rail mounting. The NetPCQ and TIM cameras can be operated in combination as stand-alone system. Remote maintenance via Ethernet is possible. Data provided by the TIM camera can be stored directly on the NetPCQ where customer-specific software can also be installed. A recovery-stick is included in the scope of delivery.

- Supports all thermoIMAGER TIM models
- Supports 120 Hz (TIM 160S), up to 80 Hz (TIM QVGA), up to 32 Hz (TIM 640) frame rates
- TIMConnect software included
- Monitor via VGA (analog)
- Integrated watchdog feature
- Optional: up to 20 m USB cable, high temperature USB cable, extendable up to 100 m Ethernet cable



thermoIMAGER TIM NetPCQ

Model	TIM NetPCQ
Ambient temperature	0 ... 50 °C
Storage temperature	-20 ... 60 °C
Relative humidity	10 to 95 %, non-condensing
Dimensions	165 x 65 x 130 mm (W x H x D)
Material (housing)	Anodized aluminum
Weight	1000 g
Vibration	IEC-2-6: 3G, 11 - 200Hz, each axis
Shock	IEC-2-27: 50G, 11 ms, each axis
Operating system	Windows 10 IOT
Power supply	12 - 24 V DC
Power consumption	approx. 9.5 W without TIM [0.76 A with 12 V]
Cooling	passive cooling (fanless)
Processor	Intel® Atom™ J1900 @ 4x2.4 GHz
Hard drive	integrated 64 GB SSD
RAM	2 GB DDR3 RAM 800 MHz
Connections	1 GigE, 2 x RS232 / 485, 3 x USB 2.0, 1 x USB 3.0, VGA
Additional functions	1x status LED



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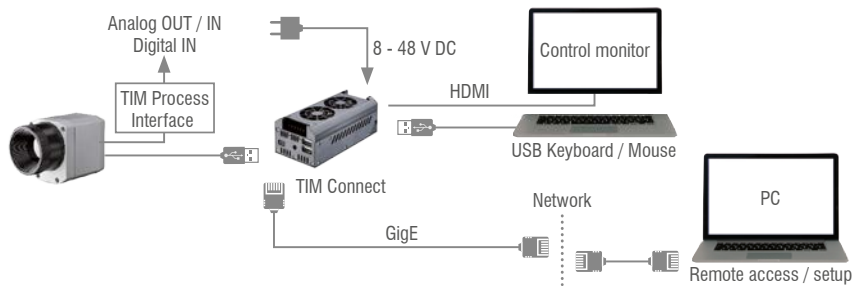
## thermoIMAGER TIM NetBox

### Miniature PC for thermoIMAGER TIM series

- Can be integrated into CoolingJacket Advanced Extended
- Miniature PC for all TIM models for standalone mode or for cable extension
- Supports 120 Hz (TIM 160S) up to 80 Hz (TIM QVGA), up to 32 Hz (TIM 640) frame rate
- Integrated hardware and software watchdog
- Additional user software can be installed
- Optional: up to 20 m USB cable, high temperature USB cable, extendable up to 100 m Ethernet cable (PoE)



thermoIMAGER TIM NetBox



Model	TIM NetBox
Operating temperature	0 ... 50 °C
Storage temperature	-20 ... 75 °C
Relative humidity	10 to 95 %, non-condensing
Material (housing)	Anodized aluminum
Dimensions	113 x 57 x 47 mm
Weight	385 g
Vibration	IEC 60068-2-6 (sinus-shaped) / IEC 60068-2-64 (broadband noise)
Shock	IEC 60068-2-27 (25 g and 50 g)
Operating system	Windows 10 Enterprise
Power supply	8 ... 48 V DC or Power over Ethernet (PoE/ 1000BASE-T)
Power consumption	7.5 W (+ additional 2.5 W for TIM camera)
Cooling	Active via two integrated fans
Board	COM Express® mini embedded board
Processor	Intel Atom® E3940 Quad Core 1.6 / 1.8 GHz (Turbo)
Hard drive	32 GB SSD
RAM	4 GB (DDR, 533 MHz)
Connections	2x USB 2.0, 1x USB 3.0, 1x Mini-USB 2.0, Micro-HDMI, Ethernet (Gigabit Ethernet)
Extensions	micro SDHC/ SDXC card
Additional functions	4x status LEDs

## Sensors and Systems from Micro-Epsilon



Sensors and systems for displacement, distance and position



Sensors and measurement devices for non-contact temperature measurement



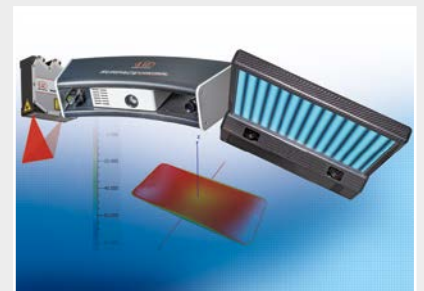
Measuring and inspection systems for metal strips, plastics and rubber



Optical micrometers and fiber optics, measuring and test amplifiers



Color recognition sensors, LED analyzers and inline color spectrometers



3D measurement technology for dimensional testing and surface inspection