THERMAL SCAN

VISUAL SCAN

REAL-TIME CALIBRATION

SW MEDICAS

0.3 °C ACCURACY

0.03°C SENSITIVITY

MADE IN EU · QUALITY GUARANTEED · EU

TÜV SUD ISO 9001

WORKSWELL MEDICAS
THERMAL CAMERA FOR FACE SCANNING
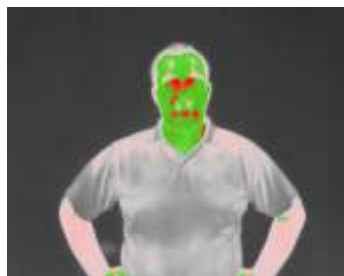
Datasheet

Release date: 25th February 2020

Revision Number: 1.1

MEDICAS technical specification

MEDICAS Key features description	
Dual camera face monitoring	Visual and Thermal camera face scanning in **real-time with calibration**
Operating onboard software No PC needed for connection	MEDICAS Software for full real-time temperature streaming and control - operating system ensures the full access to all camera functions - easy camera control via USB keyboard or Ethernet (on request)
Accurate measurement	**Black body radiation** source included in the package for accurate and stable measurement in all time, real-time recalibration every 5s
Thermal camera specification	
IR camera resolution	640 x 512 pixels
Temperature range	0 °C to +50 °C specifically calibrated for human face scanning
Temperature sensitivity	Standard 0.03 °C (30 mK)
Accuracy	± 0.3 °C (temperature accuracy according to reference blackbody)
Frame rate	Exportable version worldwide (commercial use)
Spectral range / detector	7.5 – 13.5 μm / Uncooled VOx microbolometer
Black body calibration source	Continues camera recalibration every 5s via blackbody
Lens	45°
Protective filter on lens	Filter protects the lens against external damage and dust
IR Digital zoom	1 – 14x continuous
Digital visual camera	
Resolution	1 920 x 1 080 pixels (Full HD), 1/3" sensor, Auto white balance, Wide dynamic range, Backlight compensation, Exposure and Gamma control
Noise reduction	Special 3D noise reduction function
Focus	Autofocus
Memory and data recording	
Memory	Internal high-speed SSD 256GB for image and video recording External slot for Micro SD card for taking images
Image and video formats	Radiometric JPEG images and Digital camera Full HD JPEG images Digital camera h.264 encode video HD recording Radiometric full-frame IR recording (raw data recording)
Interfaces & real-time remote control	
Ethernet (RJ-45) port	Video streaming and camera control (on request)
Micro USB 2.0 port	Mass storage access
USB 2.0 port	Direct keyboard connection for MEDICAS camera control
Micro HDMI video output	1 280 x 720 pixels (720p), Aspect ratio 16:9, Micro HDMI video output
Remote control system	MEDICAS OS ensures real-time control of all camera functions

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Camera functions	**Real-time temperature correction via Black body radiation source** **Measurement functions:** Hot spot face detection, center point **Temperature range settings:** Manual **Two-level advanced alarm for illness detection** **Camera modes:** real-time visualization in Picture-Picture mode with alarms **Temperature units:** Celsius and Fahrenheit
Software & SDK	
Camera software	On board camera software for online temperature alarms and analysis
Ethernet SDK	Ethernet SDK for camera integration (on request)
Power supply, weight & dimensions	
Input supply voltage	230VAC / 110VAC
Power dissipation (avg.)	12 W
Camera weight	< 450 grams camera
Dimensions (L x W x H)	83 mm x 85 mm x 68 mm
Mounting holes	2 x 1/4-20 UNC thread (1x bottom side, 1x upper side)
Housing material	Durable aluminium body for long-time measurement stability
Environmental conditions	
Ambient temperature range	15 °C to +30 °C (no dusty, windy and foggy environment)
Relative humidity	< 90% non-condensing
Storage temperature range	-30 °C to +60 °C
In the package	MEDICAS camera head, Blackbody radiation source, internal software MEDICAS OS, calibration certificate, power supply, hard transport case

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HDMI

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