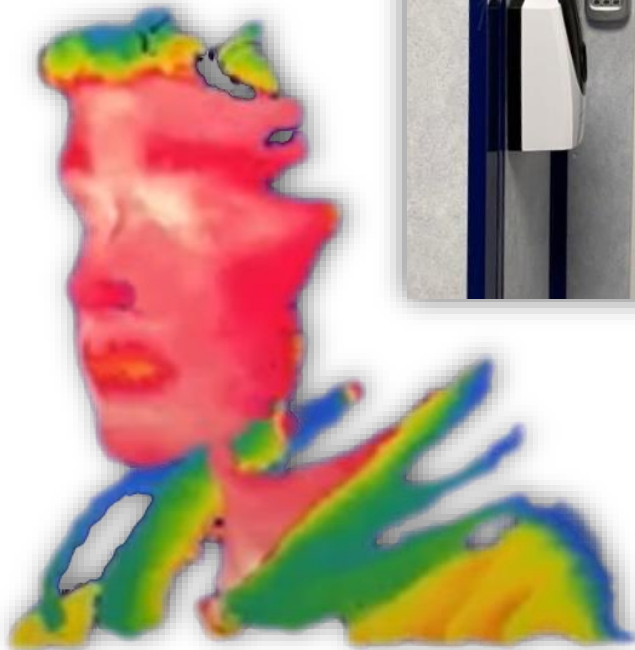


TCheck

Bio scanner access control system

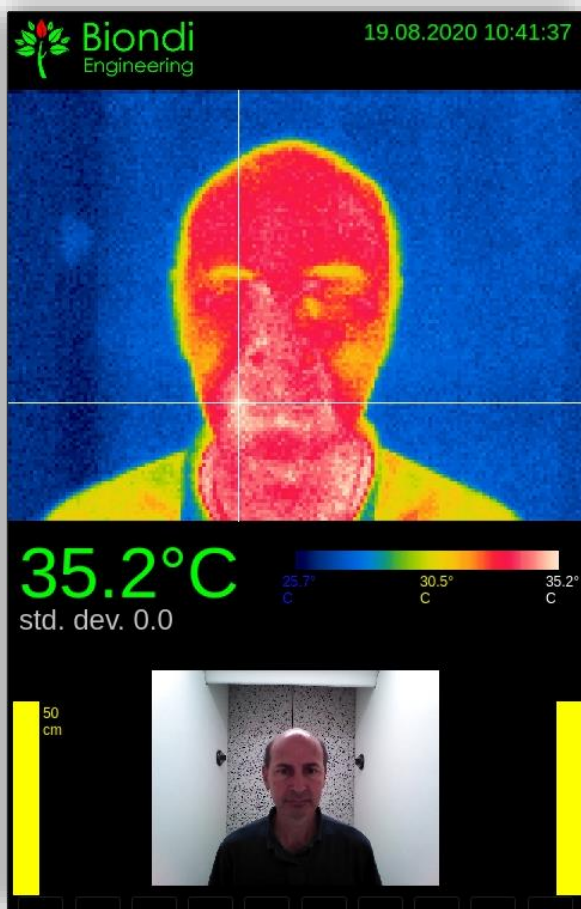
T-max
3D thermal
ECG
SpO₂
Pulse
Pressure





System features

Real-time multi parametric evaluation



The TCheck was conceived by the Biondi Engineering research team on the basis of its twenty years of experience in applying innovative methodologies for measuring biometric parameters in the animal field.

The purpose of this patented solution is not only to measure the maximum temperature of a subject, but above all it is to identify asymptomatic subjects in an early stage, which despite being infected and contagious do not show evident alterations in temperature.

The biometric smart card completes the TCheck system by adding the possibility of performing a real-time ECG Lead-I and a pulse oximetry analysis in parallel to the 3D thermal scanning of the face.



Technical specifications

Description		TC20-B	TC20-S	TC20-W
Thermal Imaging Sensing	Sensor type	Uncooled FPA		
	Wavelength	8 ÷ 14 µm		
	Resolution	19200 pixels		
	Field of view	40°H x 30°V x 50°D		
	Focal length	18 mm		
	Range	20°C ÷ 50°C		
	Accuracy	≤ 0.3 °C		
	Calibration	Built-in automatic temperature correction		
	Maintenance	Recalibration with external black body		
Response time	≤ 0.1 s			
3D Depth Sensing	Range	350 ÷ 1000 mm		
	Field of view	60°H x 50°V x 78°D		
	Accuracy	±1mm @1m		
	Laser	Class 1 eye safe, 830nm, <1mW		
Data rate	>30 Million 3D points per second			
Color Imaging Sensing	Resolution	1920 x 1080 pixel 32 bit, 30 fps		
	Field of view	70°H x 60°V x 92°D		
Biometric Sensing	Media		Smart card	Smart card
	ECG		Lead - 1	Lead - 1
	PPG		SpO ₂ / Pulse	SpO ₂ / Pulse
	Communication		Contact	Wireless
Alarm	Mode	Local alarm, message transmission, triggers		
	Triggers	Available		
Elaboration	CPU	Intel Atom® x7-E3950		
	Neural processor	3 x Intel® VPU 2485		
	Memory	Up to 8 GB LPDDR4		
	Storage capacity	Up to 128 GB solid state		
Physical Interfaces	Input voltage	12 VDC Max 2A		
	Ethernet	RJ45 (optional)		
	Alarm out	DB9 (optional)		
	Wireless	WiFi 802.11 AC 2T2R and Bluetooth 4.2 (BLE)		
Software	Interface	Database / Third party management software interface (optional)		
	Cloud	Web portal for data analytics		
	Internal App	Development of custom functions (optional)		
Individual Identification	Software	Identification based on pictures		
	Face ID	Deep learning model for face ID (optional)		
	Contact		ID	
	Wireless			RFID
Environment	Max operation	0°C ÷ 40°C		
	Standard operation	15°C ÷ 30°C		
	Storage	-40°C ÷ 50°C		
Black body	Factory settings	37°C		
	Resolution	0.1°C		
	Radiation plane	Φ50 mm		
	Stability	±0.1°C/30min		
	Ambient temp.	5°C ÷ 40°C		
	Power	100 ÷ 240 VAC 50/60 Hz Max 1A		
	Emission	0.96		
	Weight	< 4 kg		
Dimensions	155 x 133 x 137 mm			
Certification	CE			

Distributed by



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