CoMETA
Reliable Security

Covid-19 Prevention

ACCESS CONTROL DEVICES WITH THERMAL CAMERA, INFRARED THERMOMETER AND PROTECTIVE VISORS

Access control systems with recognition facial, body temperature measurement, mask use detection and people counting with simultaneous access restriction

Co730
Face Temperature Detection

PROFESSIONAL SYSTEM

Face Temperature Detection provides extremely precise temperature measurements without any contatc. An excellent additional security system for access control.

FACE DETECTION SYSTEM

CHECK TEMPERATURE

ACCESS CONFIGURATION AND CUSTOMIZATION

CAMERA'S RECORDING

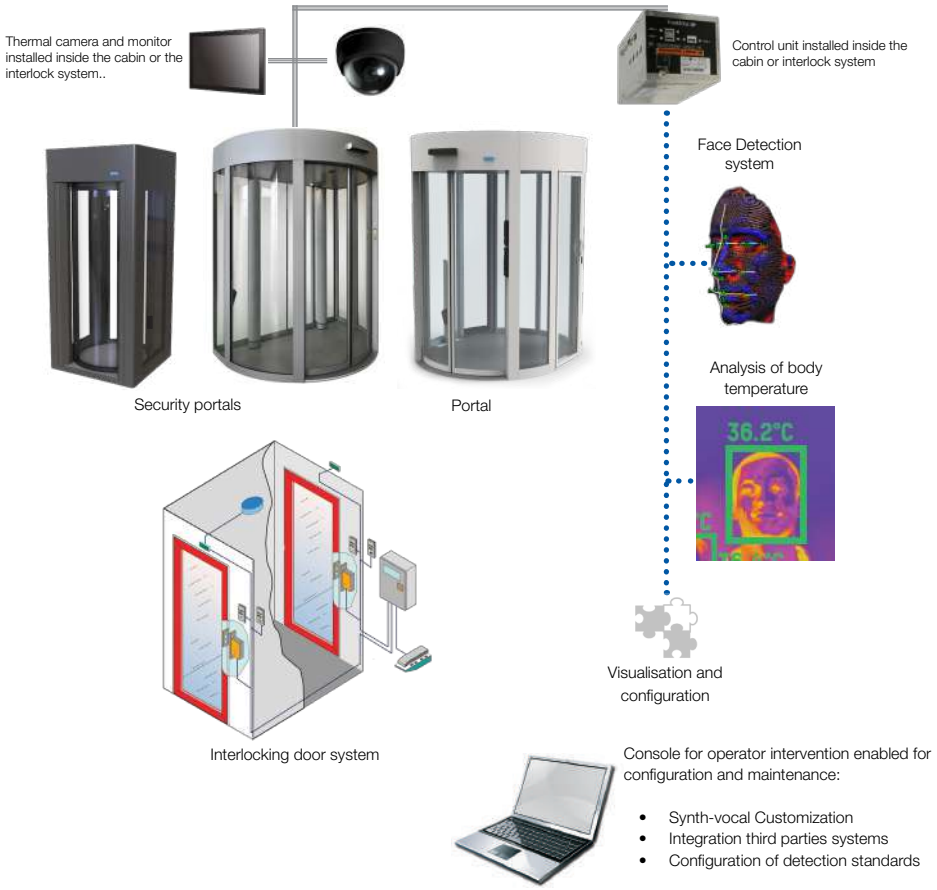
DISPLAY MONITOR

SYNTH-VOICE SYSTEM TO GUIDE CUSTOMER

DETECTION OF FEBRILE STATE
FROM ANALYSIS OF BODY TEMPERATURE

It represents a very high security solution, without physical contact and extremely careful. Ideal for any type of access to protect public health.

The system integrates with all other CoMETA controlled accesses technologies such as:
Biometrics, Anti-masking, Metal detector and single passage checking system



HOW FACE TEMPERATURE DETECTION WORKS

Given the containment measures issued by the Ministry of Health, all activities must change their safety standards and services in order to **minimize the spread of infections**. The Face Temperature Detection solution allows real-time temperature screening in subjects in transit in order to determine potential febrile states, the main symptom of viral infections.

The general temperature of a person's skin does not correspond to his internal temperature. The point of the body more practical and reliable (where the surface temperature approaches that of the body) is the corner of the eyes, where the duct tear comes to the surface. It is enough for the subject to look into the camera for less than a second. Since the higher temperature corresponds to the angle of the eye, even the presence of a mask or hat does not influence the measurement.

During the transit phase through the two interlocked doors, the user is guided by voice synthesis messages. **The temperature measurement starts from the opening of the external door** and will continue for a programmable period of time (in which the system performs face detection and thermal measurement). If the user has a normal body temperature, he obtains consent to complete the transit, otherwise the system prohibits the opening of the second door. An integrated monitor located near the internal door allows viewing of the framed face. Access is authorized only if a feverish state of the subject is not detected, that is a possible indicator of a bacterial or viral infection.

The natural location of the Face Temperature Detection system is **inside two interlocked doors / accesses** and its aim is to prevent the transit of people with potential feverish states. The system works in full efficiency when installed inside a safety cabin (portal) and is more effective if the cabin is equipped with a single passage checking system.

> Designed for the realization of automatic preliminary screening of the febrile state, for a very high level security access control.

REDUCTION OF INFECTIONS SPREAD

THERMOGRAPHY AND PRIVACY

Viral and bacterial infections that spread through human contact and by air represent a serious health problem, including the risk of a pandemic, as shown by recent flu episodes.

Thermography uses the rudiment that each body emits a quantity of infrared radiation. The body temperature measurement system allows you to quickly and safely monitor the temperature of a person in transit without physical contact.

The system **does not conflict with the Privacy directives** (Italy and EU regulation), in fact the data acquired are exclusively processed in real-time without any storage, and it proves to be a simple tool to be used even at the first transit.

ACQUISITION AND VISUALIZATION UNIT

The acquisition of the images is entrusted to a camera both with thermal sensor that in the visible, ensuring an excellent level of detail. The minimum temperature difference measured by the sensor is less than 0.04 ° C and the temperature detection algorithm has an accuracy less than ± 0.3 ° C. The combination with Face Detection allows accurate measurement of the temperature on the subject's face, guided by the image in the monitor and the integrated speech synthesis.
The transit is authorized only after the correct reading of the temperature has occurred with a result lower than the set limit.

PROCESSING UNIT (CONTROL UNIT)

The system is equipped with an **integrated data processing unit** inside the structure. In normal operation, the system operates autonomously (without any operator intervention). The advanced analysis combined with the Face Detection algorithms allows a quick identification of the face of a subject in the scene, reducing possible interference in particularly complex scenarios. For all operations on the system (maintenance, configuration), the interface with the system takes place via the Ethernet port (TCP / IP protocol) and specific software for Windows. The system allows you to analyze from one to a large number of people by detecting high temperature states in real time, protecting public health.

EQUIPMENT & FEATURES

- High operational reliability
- Central processing unit integrated in the cabin
- Dual technology IP camera: thermal module and visible module
- Thermal module with 320x240 resolution with accuracy less than ± 0.3 ° C
- Visual module 4Mpixels for overlapping details visible on thermal image
- Real time analysis with Face Detection for the discrimination of hot sources in the scene
- Monitor: active matrix TFT integrated in the cabin
- Complies with safety standards for the detection of febrile states
- Audio: speech synthesis with personalized alarms
- Reporting: failure self-diagnosis and log file generation
- User interface: Ethernet (TCP-IP)
- Operating mode: enable / disable from cabin console
- Programming: configuration, maximum detection time
- 4 digital inputs and 3 relay outputs for installation in third-parties devices

Co730.02.01
Termoscanner
Bi-spectrum

BODY TEMPERATURE DETECTION CAMERA

Access control system with body temperature measurement and mask use detection

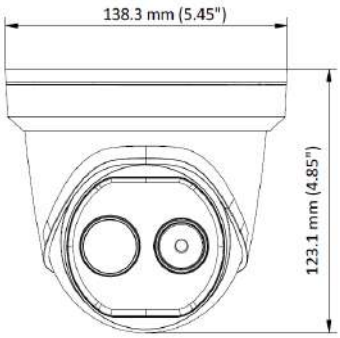
HOW THE BI-SPECTRUM THERMOSCANNER WORKS

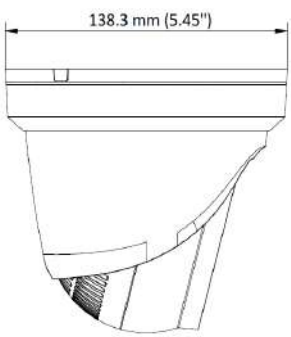
The Termoscanner Bi-Spectrum camera allows the immediate assessment of the body temperature status of the user entering the access control. Its main function is to prevent access to users with temperature above the allowed threshold.
Its natural application is to two interlocked doors/accesses.
The system integrates with all other technologies in CoMETA controlled access control as: Biometrics, Anti-Masking, Metal Detectors and Passing Uniqueness.

Depending on the selected settings can also have the function of detection use mask or anti-masking and limitation of access to the room to the number of people provided (settable).

Termoscanner dimensions

- Installation Height
1.5m [3 mm]
- Face Distance
1m [3 mm]
- NETD <40mk(0.04°C)
- Accuracy ±0.5°C
- Accuracy ±0.3°C
(with Black Body)
- Temperature Range 30-45°C





> Immediate detection of body temperature by enabling access only to users with suitable temperatures

TECHNICAL DATA SHEET

- Image Sensor: Vanadium Oxide Micro Bolometer
- Max. resolution: 160 x 120 [the output image resolution is 320 x 240]
- Spectral range: 8 µm - 14 µm
- Lens [Focal Length]: 3.1 mm
- Min. focus distance: 0.2 m
- Aperture: F1.1
- Max. Immage resolution: 2688 X 1520
- Image sensor: 1/2.7” Progressive Scan CMOS
- Day & Night: Automatically removable IR filter
- Bi-spectrum Image Fusion: Combines the thermal display with the details of the visible optics
- Picture in Picture: Combines PIP [Picture in Picture] details of thermal and optical image, superimposes thermal image on optical image
- Video Content Analysis: AI Face Detection
- Temperature detection: Face temperature measurement detected
- Temperature range: 30 °C - + 45 °C
- Temperature accuracy: ± 0.5°C
- Minimum Difference Detected: 0.1°C
- IR distance: to 15 m
- IR Intensity and direction: Automatically adjustable

CH741.10
CH742.10
Face Analyst

INDIPENDENT UNIT STAND ALONE
Face Analyst access controll combined RFID/FACE/ TERMOSCANNER e SAFETY MASK.

ACCESS CONTROL SYSTEM STAND ALONE

Access control device with body temperature measurement, facial recognition and mask use detection

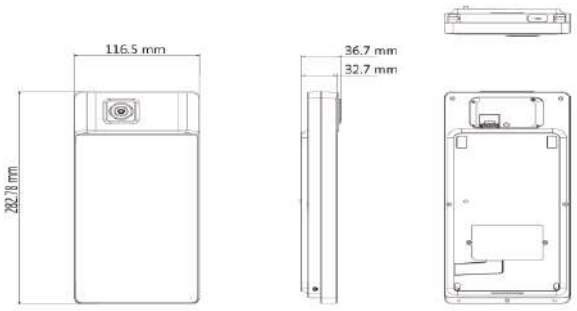
HOW FACE ANALYST WORKS

The Face Analyst device allows the immediate detection of temperature and the presence of the mask in subjects in transit to determine potential febrile states, the main symptom of viral infections.
The user is guided by the voice synthesis messages and the display allows the display of the framed face, where you will instantly see the body temperature.
The face will be framed in green in case of suitable temperature, while it will be red in case the temperature exceeds the permitted threshold.

AVAILABLE VERSIONS OF FACE ANALYST

Art.: CH741.10

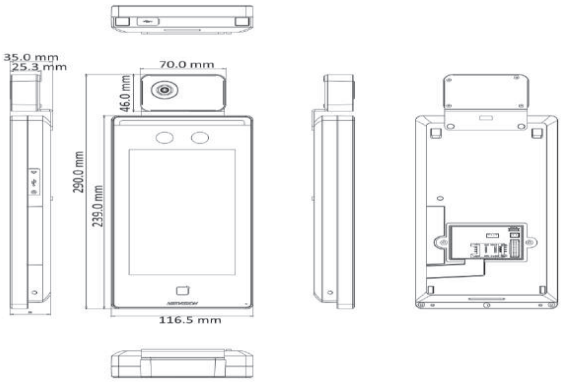
Dimensions



- Recognition distance: from 0,5 to 1,5 m
- Facial capacity: 50.000 users
- Cards capacity: 50.000
- Events capacity: 100.000

Art.: CH742.10

Dimensions



- Recognition distance: from 0,3 to 1,8 m
- Facial capacity: 6.000 utenti
- Cards capacity: 6.000
- Events capacity:100.000

OPTIONALS FOR ART. CH742.10

Floor stand	Table stand
	

> Fast, precise and intuitive access control security device

EQUIPMENT AND FEATURES

- Supports uncooled vanadium oxide sensor to measure subject temperature
- Temperature measuring range: 30 °C to 45 °C (86 °F to 113 °F), accuracy: ± 0.5 °C without blackbody calibration
- Rapid Temperature Measurement Mode: detects the face and detects skin temperature without identity authentication.
- Different authentication modes are available: card and temperature, face and temperature, card and face and temperature, etc.
- Mask usage warning: If the recognized face is not wearing a mask, the device will provide a voice reminder. At the same time, authentication or participation is valid.
- Mask usage warning: If the recognized face is not wearing a mask, the device will provide a voice reminder. At the same time, authentication or participation will not be successful.
- Display temperature measurement results on the authentication page
- Voice alert when abnormal temperature is detected
- Configurable port status (open/closed) when abnormal temperature is detected
- Transmits temperature information online and offline to the client software via TCP/IP communication and saves the data to the client software (optional)
- Duration of facial recognition 0.2 s/user; facial recognition accuracy rate ≥ 99%
- Recommended height for facial recognition: between 1.4 m and 1.9 m
- Supports 6 attendance status, including check in, check out, break in, break out, inbound overtime, outbound overtime
- Watchdog design and tamper function
- Audio request for authentication result
- NTP, manual time synchronization and automatic synchronization
- Connects to external access controller or Wiegand card reader via Wiegand protocol
- Connects to the safety door control unit via RS-485 protocol to prevent the door from opening when the terminal is destroyed
- Import and export data on the device from the client software (optional)

DIFFERENTIATED FEATURES PER MODEL:

Art. CH741.10

- Recognition distance: 0.5 to 1.5 m
- Facial capacity: 50,000 users; Card capacity: 50,000; Event capacity: 100,000

Art. CH742.10

- Recognition distance: 0.3 to 1.8 m
- Facial capacity: 6,000 users; Card capacity: 6,000 ; Event capacity: 100,000

*** Biometric recognition products are not 100% applicable to anti-spoofing environments. If a level of higher security, use more authentication modes.**

To obtain an accurate temperature, after turning on the device, you must wait 90 minutes to heat the device.

FLEXIBLE APPLICATION

The devices for immediate detection of body temperature, thanks also to the possibility of wall and floor installation, allow excellent usability of spaces and find a natural place in many environments, such as:

- Banks
- Industries
- Pharmacies
- Shops
- Public institutions

Or in any case in all those structures that provide a large flow of personnel and public use.

BC501.01
Infrared
Thermometer

INFRARED THERMOMETER FOR QUICK AND EASY OPERATION

Useful device for access control with access measurement body temperature

HOW THE INFRERED THERMOMETER WORKS

INFRERED THERMOMETER

The front thermometer is a type of thermometer that uses the infrared reception principle to measure body temperature. During use, simply aim the probe at the front position and from 1 to 5 cm away from the measuring side, the human body temperature can be measured quickly and accurately.

FEATURES AND BENEFITS

Basic operating principle:
All objects with temperature above absolute zero always emit a certain proportion of infrared radiation energy depending on the temperature.
The distribution of the size and wavelength of the radiation energy is closely related to its surface temperature.
The wavelength of infrared radiation wavelength irradiated by human body at 36-37; is 9-13; M. According to this principle, the surface temperature of human forehead can be measured accurately and correct the temperature difference between the forehead and the real body to display the accurate body temperature.

Main technical indicators:

- Ambient temperature: 10° : 40°;
- Relative temperature: 30% 75%.
- Power source: DC3V (2XAAA battery)
- Dimensions: 160 mm X 100 mm X 40 mm
- Net weight: 100 g
- Resolution of the indication: 0.1°;
- Measuring range: 32.0 : 43.0
- Indication error: ± 0.2
- Measurement time: 0.5 seconds
- Auto power off time: 15 seconds

> For quick and practical use, it detects body temperature without contact

PRODUCT STRUCTURE

Application and contraindication:
STRUCTURE: The front thermometer mainly consists of infrared temperature sensor, probe sleeve, display unit, power supply and measuring circuit.
APPLICATION: display body temperature by measuring the heat radiation on the forehead.
CONTROINDICATION: Do not point the reader at injured skin surfaces,
inflamed, presenting with trauma or post-operative period etc.

N.B.: This information sheet is to be considered purely informative and does not contain any kind of warranty neither implicit nor explicit.

WHERE TO APPLY THE INFRARED THERMOMETER

The infrared thermometer can be used by accommodation facilities, shops, industries, warehouses, companies and public places.
The measurement of body temperature is an important step to ensure full protection of public health, for yourself, your employees, your customers and everyone in the vicinity.

BC401.01
3D printed
Protective Visor

SAFE, ERGONOMIC AND PRACTICAL PROTECTIVE BARRIER

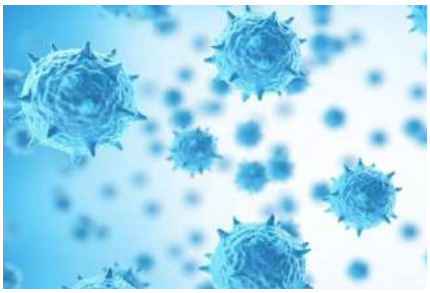
A protective visor must first and foremost play the role of a barrier, at the same time it must have ergonomic and practical features to facilitate the the work of the person wearing it.

Constructed with lightweight material so as not to tire the operator during even prolonged use, it guarantees optimal visibility.
The main features that a visor must have are: anti-glare, anti-scratch and anti-fogging, to allow the wearer to work comfortably and precisely.

The material with which it is produced is resistant to normal products for disinfecting medical-surgical instruments and easy to clean.

3D PRINTED SAFETY VISORS

It is necessary in all situations of infectious danger to protect oneself with the appropriate PPE, in this case the medical protective visor that absolves the barrier function by protecting the eyes and mucous membranes of the mouth.



Unlike glasses, the protective visor allows a wider protection by creating a barrier for the whole face.

Its use does not allow the particles of saliva, for splashing, to come to contact with the mucous membrane of the eyes or mouth of the healthcare professional, thus protecting it from contact infections.

“ Optical class 1 PPE with increased robustness, conforming to UNI EN 166

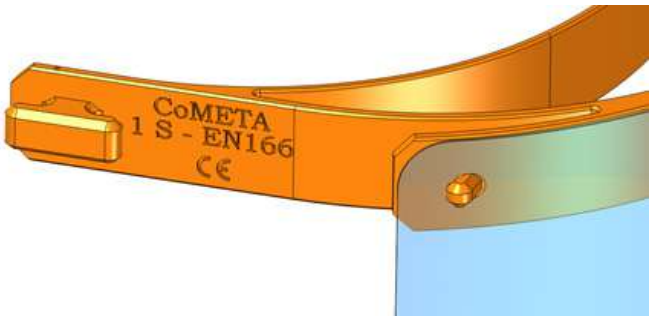
VISION19 MODEL

Protective visor for intensive professional use, high transparency and resistance, sterilisable, 3D printed.

- For professional use
- Comfortably wearable anti-fog visor with elegant design
- Adjustable harness for a comfortable fit in most sizes
- Made in Italy

Data sheet:

- Code: CoDPI.PR1
- Material structure: ABS
- Screen material: 0.5 mm PET
- Weight: 80 grams



NOTE

The visors, which do not replace the necessary masks, represent a first barrier to protect the eyes and mucous membranes of the mouth from sneezing and saliva of patients, creating a barrier for the whole face against contact infections and thus providing valuable support in the protection of doctors and nurses operating in the front line.

CoMETA
Reliable Security

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