



# 02PN20v3 Elliptic

**ANTI-COVID  
SECURITY SOLUTION**

ANTI-COVID COMPLIANT SECURITY CHECKPOINT  
FOR THE AUTOMATIC INSPECTION OF PEOPLE IN TRANSIT

## TRIPLE CHECK

### 1 DETECTION OF METALLIC THREATS WITH MINIMUM CONTACT

- ▶ Low rate of nuisance alarms and secondary checks
- ▶ High localization accuracy
- ▶ Display of individual and multiple targets

### 2 AUTOMATIC DETECTION OF HIGH BODY SURFACE TEMPERATURE

- ▶ Infrared, visible and multispectral images
- ▶ Automatic identification of maximum temperature zones
- ▶ Exclusive integrated thermal calibration system with double reference
- ▶ Selective measurement on one person only in transit

### 3 THROUGHPUT CONTROL WITH CHECK OF TRANSIT DIRECTION AND COMPLETION

- ▶ Multiple optical barriers
- ▶ Automatic count of transits and alarms

#### ■ OPTIMISED TOUCHSCREEN USER INTERFACE FOR MANAGING CHECKS AND DISPLAYING ALERTS

- ▶ Metal and high temperature alarms
- ▶ Recording of transit and alert data
- ▶ Integrated tools for advanced search of alarm events

#### ■ STAINLESS STEEL AND TECHNICAL POLYMER CONSTRUCTION

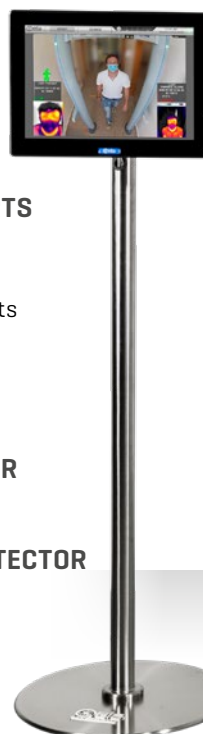
#### ■ INTEGRATED RADIOACTIVE MATERIAL DETECTOR

[RADIATION SENSOR OPTIONAL]

#### ■ INTEGRATED CELL PHONE FERROMAGNETIC DETECTOR

[MI2™ SENSOR OPTIONAL]

#### ■ PATENT PENDING



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*Threat Detection through Electromagnetics*

## The rapid spread of COVID-19 infections has required the introduction of containment measures at all levels.

Measures include the use of face masks, social distancing and also the measurement of body temperature as an indicator of possible virus infections.



Security checkpoints at the entries to airports and other sensitive buildings should now be equipped with security systems compliant with the new measures. This means detecting target threats with the minimum rate of nuisance alarms in order to:

- ▶ Limit the number of secondary checks necessary
- ▶ Reduce contacts between checkpoint operators and persons in transit
- ▶ Reduce waiting times upstream from the system.

**All in all, this requires a metal detector with a very low nuisance alarm rate.**



In order to comply with COVID containment measures, screening operations should also include the measurement of body surface temperature to intercept fever temperatures. This has to be done without adding any extra manual operations and avoiding any contact between screeners and the persons screened.

The 02PN20v3 Elliptic is an integrated solution for security checkpoints which complies with the requirements noted above.

### OPTIMISED TOUCHSCREEN USER INTERFACE FOR MANAGING CHECKS AND DISPLAYING ALERTS



#### MAIN SCREEN



- 1 LAST TRANSIT**
  - ▶ Date of transit ▶ Transit ID
  - ▶ Transit result
- 2 IR IMAGE**
  - ▶ Detail of last transit

- 3 LAST THERMAL ALARM**
  - ▶ Date of alarm ▶ Alarm ID
  - ▶ Alarm result
- 4 IR IMAGE LIVE**



#### ALARM SIGNALLING



- ▶ **VISUAL SIGNAL**
  - Graphical display via pop-up window
- ▶ **AUDIO SIGNAL**
  - Audible alarm

The **02PN20v3 Elliptic** is a security checkpoint station, **compliant with COVID containment requirements** which offers state-of-the-art features for the security and protection of inspection personnel and inspected persons.

**ANTI-COVID  
SECURITY SOLUTION**

### ANTI-COVID COMPLIANT SECURITY CHECKPOINT

- Detection of metallic threats in accordance with security level settings. This is done by a next-generation inductive detector with high range uniformity and excellent discrimination of metal personal effects thereby reducing the number of secondary checks necessary
- High accuracy detection zone display for individual and multiple objects to speed up screening operations
- Body surface temperature measurement using a combined visible-infrared multispectral system which automatically indicates the maximum value and signals an alarm when the legal threshold is exceeded
- Continuous calibration of the thermal measuring system using two grey stabilised bodies
- Transit direction and count verification with synchronization of the temperature measurement of the inspected person inside the gate. This ensures maximum accuracy and unique signalling
- Display of alarm signals on a standard operator interface on a kiosk fitted with a PC monitor
- Additional optional sensors for detecting radioactive material or cell phones

### CHECKPOINT MONITORING AND RECORDING

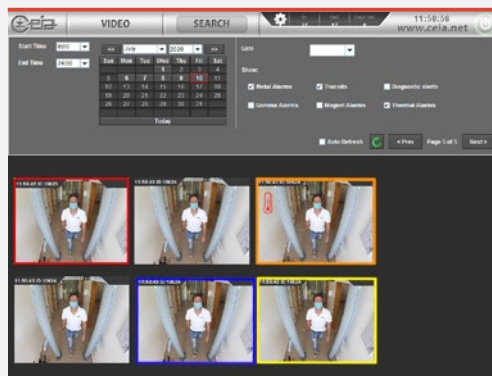
- Detailed reporting of the transits data and the security device configuration data
- Data collection from each gate detailing the information on every single transit including body temperature, metal alarms, gamma alarms [optional] and cell phone alarms [optional]
- Monitoring of the functionality of each gate
- Setting of the gate working parameters
- Metal and high temperature alarms
- High security data encryption
- Transits flow monitoring

### SOFTWARE FEATURES

- Wide capability of data storage: 100,000+ transits
- Programmable data retention time
- Videos include time/date stamp, alarm, and all details on the alarm type
- Filters video results by alarm, date, and time
- Exports full video or still images of any frame



#### SEARCH PANEL



- ▶ Press the **SEARCH BUTTON** to display the transits
- ▶ The **TYPE OF ALARM / TRANSIT** is shown in the following colour:

TRANSIT	—
METAL	RED
RADIOACTIVE MATERIAL	BLUE
HIGH BODY TEMPERATURE	ORANGE
FERROMAGNETIC	YELLOW



#### VIDEO PLAYBACK



- ▶ **TO PLAY THE VIDEO**, select the thumbnail, then press the play button

## METAL DETECTOR - SPECIFICATIONS

<b>GATE STRUCTURE</b>	State-of-the-art, robust and compact elliptical columns Protected against aging, weather and wear
<b>OPERATIONAL FEATURES</b>	High discrimination and transit flow rates five or more times greater than other metal detection systems Quick reset time as short as 0.2 seconds for high throughput rate Very high detection speed (up to 15 m/sec.) Built-in operational functional verification One-touch key reading of inbound, outbound and Security Level Data
<b>QUALITY</b>	Continuous self diagnostic system Proven reliability No periodic re-calibration and preventive maintenance required No scheduled maintenance Fully digital design
<b>ALARM SIGNALING</b>	Multi-zone display bar for "height on person" localization 4 light bars with selectable entry/exit and pacing indication Green and red metering signals proportional to the mass of the detected target 10 selectable continuous and pulsed tone plus 34 special tones 10 selectable sound intensities ranging from 0 to 90 dbA at 1m
<b>TYPE OF SIGNALING</b>	Fixed or proportional to the mass in transit - visible from 6m under lighting of 4000lux 60 distinct zones (20 vertical x 3 lateral) entry and exit side
<b>PROGRAMMING</b>	Up to 50 built-in Security Programs Remote via Infrared Remote Control Unit, BT or Ethernet 10/100 base T (option) interface SECURITY LEVEL International Standard (IS) command Chip card Local by Control Unit alphanumeric display and keyboard Programming and chip card access protected by user and super-user passwords
<b>ENVIRONMENTAL DATA</b>	Power Supply : 100...277V~ ±10%, 47...63Hz, 40 VA typical consumption Operating temperature: -20°C to +65°C (-37°C to +70°C upon request) Storage temperature: -37°C to +70°C Relative humidity: 0 to 95% (without condensation)

## THERMAL DETECTOR - SPECIFICATIONS

<b>MULTISPECTRAL IMAGE</b>	Visible, 0.4 μm - 0.7 μm Infrared 8 μm - 14 μm
<b>VISIBLE TECHNOLOGY</b>	RGB C-MOS Resolution 1280 x 800
<b>INFRARED TECHNOLOGY</b>	Bolometric Measurement sensitive elements: 19.200
<b>THERMAL ALARM THRESHOLD</b>	Programmable from 34.0°C to 42.0°C
<b>ACCURACY</b>	+/- 0.3°C
<b>MEASUREMENT HEIGHT</b>	1.000 mm (minimum) / 2.050 mm (maximum)
<b>CALIBRATION</b>	Automatic, by exclusive integrated thermal calibration system with double reference (patented) Each reference is constantly controlled by a sensor device that is 100% tested on a production setup that is NIST traceable and verified with equipment that is calibrated to ISO/IEC 17025 accredited standards.
<b>WORKING ENVIRONMENT CONDITIONS</b>	INDOOR, 15°C - 30°C Relative humidity < 80%

## ORDERING INFORMATION

**COD. 02PN20V3/EZ**

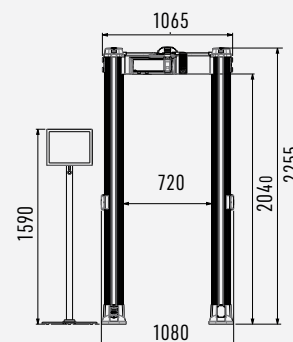
- ▶ METAL DETECTOR GATE
- ▶ APSIM3Plus INTEGRATED WEB-SERVER & LOGGER
- ▶ KIOSK WITH PC MONITOR
- ▶ SUPPORT WITH VISIBLE AND THERMAL CAMERA
- ▶ DUAL GREY BODY CALIBRATION UNIT

### OPTIONS

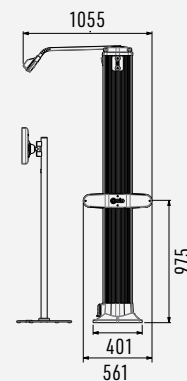
- ▶ RADIATION SENSOR: COD. 56108
- ▶ FERROMAGNETIC SENSOR: COD. 69723

## DIMENSIONS (mm)

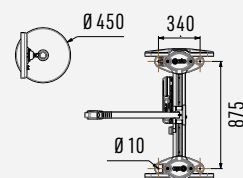
### FRONT



### LATERAL



### TOP



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