

# Thales Gemalto Biometric eKiosk



## Security, convenience and flexibility

- Gemalto Biometric eKiosks with **face recognition** are designed to achieve a new level of **security** in user authentication and **convenience** in using **eServices**
- **Biometric data confidentiality** is assured with a matching algorithm using only face or fingerprint data secured within the eDocument
- A comprehensive array of **build-in high-quality components** paired with **Thales' expertise** with ID documents, biometrics and secure software solutions enables fast, reliable and confidential identity checks to ensure broadest support for various use cases

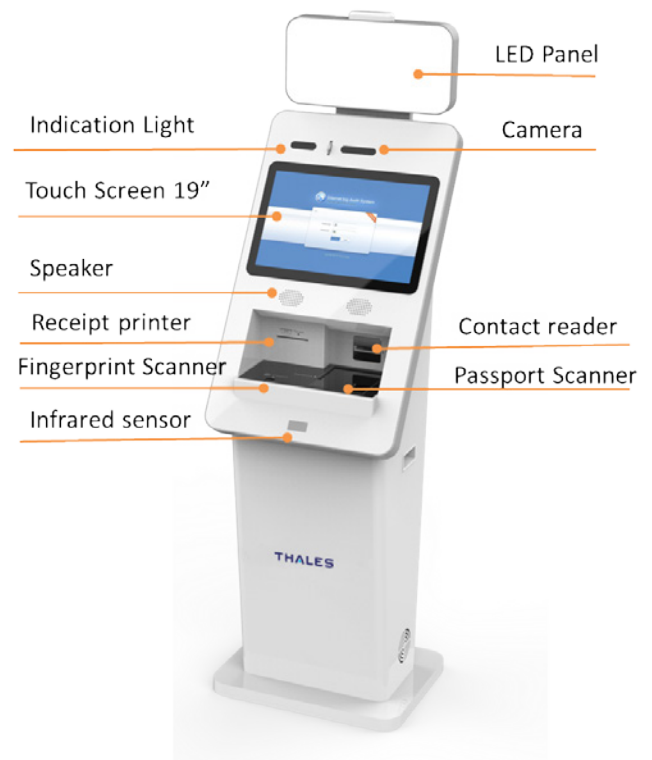
## Function highlights

- Face recognition enables convenient **and secure user authentication**
- A sophisticated **liveness detection** does not ask users for specific gestures, but uses **3D depth information** of the user's face to prevent spoofing the system with photos or videos
- Alternatively, fingerprints can be used for biometric user authentication, also with advanced liveness detection to **prevent** to fool the system with **fake fingerprints**
- A **easy to use** web based graphical user **interface with touch control** that **automatically activates** when a person approaches the kiosk provides access to a variety of public and private eServices
- eKiosk set-up to **easily interface** with **Thales' document management, digital identity** and **post-issuance** services
- For using any sensitive and private services, the eKiosk will require an official identity document for **strong 2-factor user authentication**
- **Thales Gemalto Document Verification solution** verifies both the **physical and electrical features** of any valid ID document (card or passport) to prevent authentication with falsified documents and hence ID theft

# Thales Gemalto Biometric eKiosk

## FEATURES

- Built-in **3D camera** for **face recognition and liveness detection** with additional lamp light for reliable authentication even in difficult illumination situations
- Single **fingerprint scanner** with fingerprint matching and **liveness detection**
- **Thales document scanner** for **cards and passport** datapages **visual verification** and for reading barcodes and MRZ data (Machine Readable Zone)
- **Online connection** to a Thales Gemalto Document Management System (DMS) or other back-end databases to block usage of any **document reported as lost, stolen** or otherwise **watch listed**
- Integrated **contactless RFID chip reader** for smartcards and ePassports
- Additional **contact chip reader** for smartcards in ID1 format incl. mag stripe reading
- Contact and contactless reader with **Thales reader software** for **digital verification** of eDocuments digitally, to perform **strong on-card user authentication** (face, fingerprint, PIN) and to use and manage chip applications in **post-issuance** mode
- Integrated large **high-resolution touch screen** with web-based user interface and access to various online services for **easy** navigation and **convenient** kiosk usage
- **Infrared sensor** at the front for detection when user is close to the kiosk and to **automatically turn on** screen



- Build-in speakers for improved user experience and support for visually impaired persons
- Build-in **printer** to issue **receipts** and transaction **reports**
- **Point-of-Sales** bank card reader (optional) to proceed with **payment** for a service

A front view of the Thales Gemalto Biometric eKiosk, showing the 19-inch touch screen, the fingerprint scanner, the document scanner, and the contactless reader. The kiosk is white with a blue 'THALES' logo on the front panel.

## MAIN HARDWARE COMPONENTS

- Robust single fingerprint scanner device: Futronic FS88H FIPS201
- Document scanner (cards or passports, incl. MRZ and RFID chip reading): Thales AT10K
- Contact card reader: IDTECH SPT3-598-00- 1LG0C-0C
- Stereo camera for face recognition and liveness detection: Intel Real Sense D415
- Workstation with Intel Core i7 67000K CPU, 8GB RAM and 250GB SSD (Windows 10)
- High-definition 19" LCD touch screen
- Receipt Printer: ICOD TM80A
- Speakers
- Lamplight for camera
- Infrared proximity sensor

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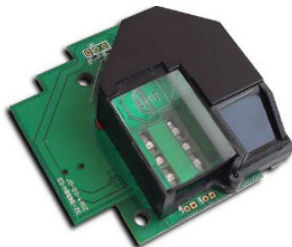
## Thales Document Reader Specifications

- Capable to read multiple types of documents in visible, infrared and ultraviolet light using 24-bit color and true-color image matching technology
- Default 370 DPI image resolution with 3.1 megapixel sensor (optional 10 megapixel sensor for 550 DPI high-resolution)
- RGB 24 bit color system
- Reads documents and barcodes placed at any rotation
- OCR data capture of the Machine Readable Zone (MRZ)
- Anti-glare technology eliminates image artifacts from laminates or OVDs
- Auto-triggering of document capture – presence of document is automatically detected
- Contactless microchip reading for ePassports and contactless smartcards (ISO 14443 Type-A and Type-B)
- Low-scratch glass with oleophobic coating and internally sealed optical chamber to prevent dust ingress for low maintenance & easy cleaning
- Multi-color status indicators to provide easy comprehensible user feedback



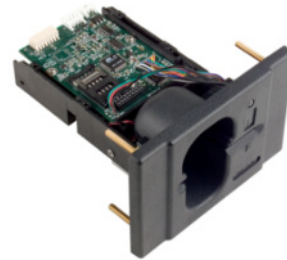
## Fingerprint Scanner Specifications

- Robust single fingerprint capture device with advanced CMOS sensor technology and precise optical system
- Infrared LED light source
- Scratch resistant crown glass with 16.26 x 24.38mm scanner window for heavy duty use
- 320x480 pixels resolution, 500 DPI, 8 bit grey level
- Build-in special electronic circuit for Live Finger Detection (LFD)
- FBI certified acc. PIV-071006 Image Quality Specification and FIPS 201 for Personal Identification Verification (PIV)
- Microsoft WHQL standard support



## Contact Smartcard Reader Specifications

- Reads both magnetic stripe and smart cards
- Compliant to cards acc. ISO 7810, 7811 and 7816
- Gold-plated contacts for dependable connections to card pads and reliable electronics to guarantee over one million card cycles
- Tri-color LED indicating read status



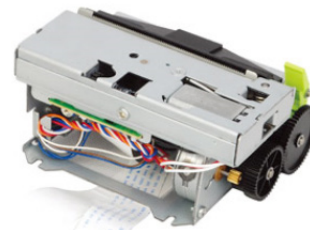
## 3D Camera Specifications

- Stereo camera with both depth and RGB sensor for face recognition and liveness detection
- IR light projector for illuminating person to collect depth data
- Dual rolling shutter sensors for up to 90 FPS
- Full HD RGB camera synchronized to depth data with up to 1280x720 resolution at 30 FPS
- Intel RealSense™ Vision Processor D4 for real-time depth
- Depth FOV (Field Of View DxVxH): 69.4 x 42.5 x 77, 0.3 m minimal depth distance



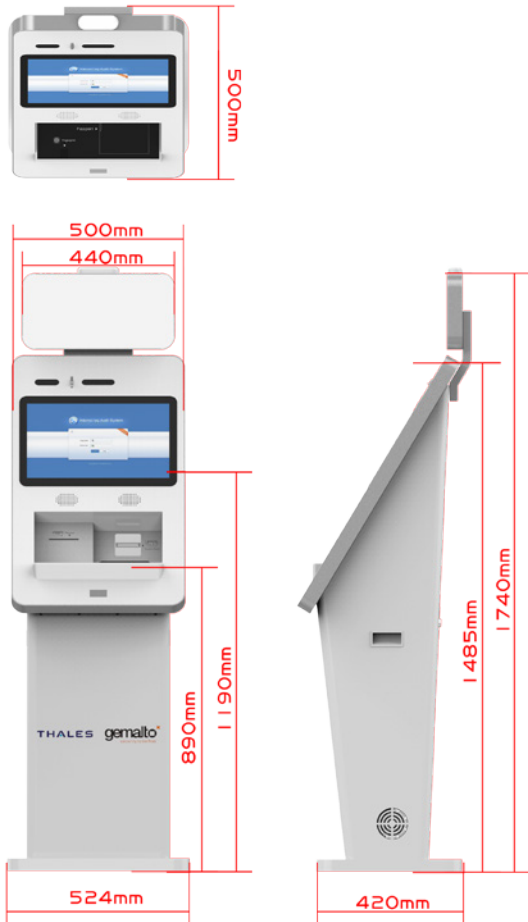
## Receipt Printer Specification

- Thermal printing on 80mm paper roll with integrated cutter and anti-paper jam system
- 8 dots/mm resolution, 72mm effective printing width, 150 mm/s printing speed



# Thales Gemalto Biometric eKiosk

## Dimensions



- Height: 174 cm
- Width: 500 cm
- Depth: 500 cm
- Pedestal: 524cm x 420cm
- Weight: 66kg

## Power

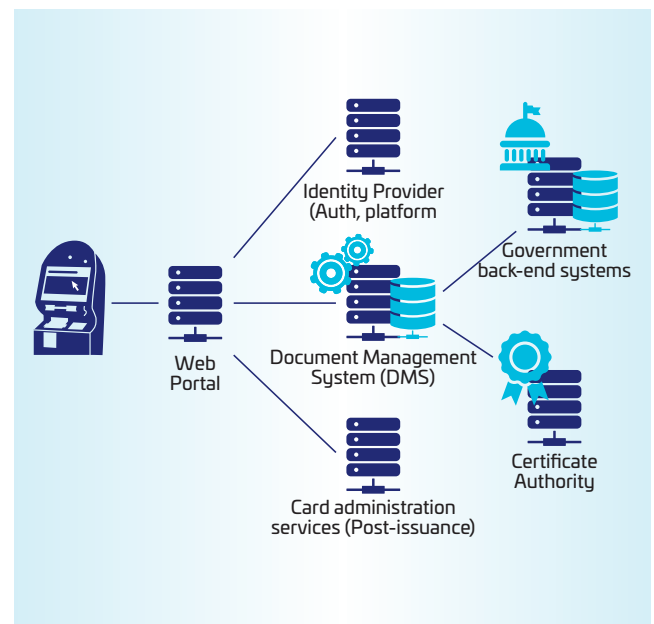
- Input voltage: 220 VAC (+/- 20%)
- 50 Hz (+/-10%)

## Network connectivity

- 2 Gigabit network ports

## Service integration

- Seamless integration with Thales Gemalto cloud-based server solutions:
  - Thales Gemalto Document Management System (DMS),
  - Thales Gemalto Post-Issuance Server (PIS),
  - Thales Gemalto Public Key Infrastructure (PKI),
  - Thales Gemalto Digital Services (IdP, ID Federation, etc.)
  - Thales Gemalto ID Verification Solutions (KYC)
  - ...



- Connectivity to 3rd party solutions via web portal
- Optional locally installed Thales Gemalto eID Document Middleware for offline card transaction

## Regulatory compliance

- CE conformity (compliant to Machinery Directive 2006/42/CE, Low Voltage Directive 2006/95/CE and EMC 2014/30/EU)
- RoHS Directive 2011/65/EU

## Environment

- Humidity: 0% to 80% (R.H. non-condensing)
- Temperature: -10° to 35° C operating; -20° to 50° C storage