OUTDOOR MORPHOACCESS™ 520 DUAL CARD READER

FIPS 201 BIOMETRIC READER

FAST, ACCURATE AND RELIABLE

MULTI-FACTOR AUTHENTICATION

GSA FIPS 201 APL's most accurate and interoperable biometric reader*

Meets authentication assurance levels defined by SP800-116

GSA FIPS 201 certified CHUID reader for entire FASC-N

FBI PIV-IQS and FIPS 201 certified fingerprint sensor

FIPS 201 approved template generator and matcher

IP 65 weatherproof

*NIST MINEX Test results 2006-Present

Morpho is a leading innovator in large fingerprint identification systems, facial, tattoo, DNA and iris recognition. With over 35 year's experience, Morpho has unsurpassed accuracy in US government benchmark testing, captured more than 3 billion fingerprints, deployed over one million fingerprint readers and it's products are used by more than 450 government agencies in over 100 countries.

SAFRAN
Morpho

FIPS 201 BIOMETRIC READER

FAST, ACCURATE AND RELIABLE

MULTI-FACTOR AUTHENTIFICATION

A Host of Features:

- World's most refined, accurate and trusted fingerprint algorithms

  #1 Rated Interoperable Fingerprint Matching Algorithm (NIST MINEX Test)

  #1 Rated Proprietary Fingerprint Matching Algorithm (NIST PFT Benchmark Test)

  #1 Rated Fingerprint MOC Algorithm (NIST MINEX II)

  #1 Rated Latent Fingerprint Matching Algorithm (NIST ELFT-EFS Test)

- MorphoSmart™ Optic Fingerprint Sensor
- Morpho fingerprint image enhancement

  Filters and corrects the effects of dirt, grease, moisture and cuts

- Fake Finger Detection for Liveness Detection
- Integrated Contact and Contactless smartcard reader
- Selective output of all FASC-N elements via Wiegand including expiration date, GUID, ICI and CI
- PIV Card Authentication

  CHUID (Unsigned CHUID)

  CHUID (Authenticated)

  CAK Authentication

  Biometric Authentication

  PKI (Active Card Authentication for PIV)

  CAK + Biometric

  PKI + Biometric

- TWIC Card Authentication

  Signed CHUID Verification

  Unsigned CHUID Verification

  Active Card Authentication

  CHUID + Biometric Verification

  CHUID signing certificates + Active Card Authentication + Biometric Verification

- Match-On-Card (MOC)
- Secure data communication using Secure Socket Layer (SSL)
- Dual-core ARM9 microprocessor, with multi-thread processing, providing unmatched performance
- Power over Ethernet (POE)
- LCD graphical display
- Ruggedized Backlight keypad
- Networkbased reader management
- Seamless integration into existing PACS and network environments
- Data COM via Ethernet with DHCP, LAN or WAN through gateways and subnets, RS422, RS485, Wi-Fi
- Capable of withstanding harsh climatic environments

MorphoAccess™ readers are compliant with TAA, ARRA/Buy American Act

Outdoor MorphoAccess™ 520 Dual Card Reader:

- **Dimensions**
  218x289x99mm
- **Communication Interface Capabilities**

  Port for ID Card Management
  - Customizable Wiegand (26-256 bit), RS485, RS422, Clock & Data

  Port for Terminal Configuration
  - Ethernet (10/100 Base T) with DHCP
  - Wireless LAN (Wi-Fi)
  - LAN or WAN through gateways and subnet mask
- **Fingerprint Algorithm**

  GSA FIPS 201 PIV approved matcher/Morpho proprietary

  Template extractor and matcher NIST MINEX certified

  Morpho fingerprint image enhancement – Identification, filtering, and correction the effects of dirt, moisture, scars, cuts, latent prints and foreign objects to increase accuracy
- **Fingerprint Sensor**

  MorphoSmart™ Optic sensor
  - 500 dpi resolution
  - FBI PIV-IQS and FIPS 201 certified
  - Wide area, accurate fingerprint sensor, for high definition fingerprint image acquisition (.9" x .9")
  - Allowable finger rotation +/-70°

- **Contact Smart Card Reader**

  PC/SC ISO 7816 Contact Smart Card Reader
- **Contactless Smart Card Reader**

  PC/SC ISO 14443 MiFare/DESFire contactless card reader
- **Display and Key Pad**

  Backlit LCD graphical display, 128x64 pixels

  Backlit keypad with 12 Keys, +4 programmable function keys, Buzzer and bi-color LED
- **Processor**

  Dual-core ARM 9 microprocessors with multi-thread processing capability
- **Security**

  SSL on TCP/IP network

  Anti-tamper and anti-theft switches, Secure screws

  Fake Finger Detection with optronic sensor
- **Power supply**

  9V to 16V (250mA typical @ 12V) or Power Over Ethernet (POE)
- **Operating Temperature**

  14° F -122° F

  -40° F-122° F (LOW TEMPERATURE OPTION)
- **Certifications**

  FIPS 201 PIV, TWIC ICE, FBI PIV IQS, FCC and RoHS

Available Models:

Outdoor MorphoAccess™ 520 Dual Card Reader
- Integrated Contact and Contactless Smartcard Reader
- Ingress Protection IP65

Outdoor MorphoAccess™ 520 Dual Card Reader Low Temperature
- Integrated Contact and Contactless Smartcard Reader
- Ingress Protection IP65
- Operational to down -40° F

Outdoor MorphoAccess™ 521 Dual Card Reader
- Integrated Contact and Contactless Smartcard Reader
- Ingress Protection IP65
- Fake Finger Detection

MorphoAccess™ 520 Dual Card Reader
- Integrated Contact and Contactless Smartcard Reader

MorphoAccess™ 521 Dual Card Reader
- Integrated Contact and Contactless Smartcard Reader
- Fake Finger Detection

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