Authentication and Identification Solutions

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Who we are...

Founded in 1992, X Tec is an independent developer, producer, and licensor of Credential Management, Access Control systems and security solutions for a wide range of government and commercial uses. Headquartered in Miami, Florida, the Company’s premier breakthrough technology, Mediametrics, is a peerless, non-finite state based, security solution.

Mediametrics enables business and organizations in the public and private sectors to securely process, store, and manage proprietary information. Key areas of focus for X Tec include electronic commerce, domain and key management, transaction and data processing, access control, communications, and information systems.
XTec’s Core Competencies

- **Design and Development of Secure Solutions**
  - Token Based Authentication
    - Magnetic Stripe and/or Chip Cards
    - Integration with Biometric Systems
    - Secure Token Interfaces (Card Acceptors)
  - Stored Value Systems (E-Purse)
  - Physical / Logical Access Solutions
  - E-Commerce / Transaction Solutions
  - Key Management / Key Storage Systems
    - (Public Key or Strong Symmetric Encryption)
  - Embedded Secure Solutions

- **Consulting Services**
  - Security & Authentication Architectures
    - Database and Transaction Protocols
  - Vulnerability / Security Needs Assessment

- **Crypto-System Implementation**
  - Embedded and/or Network Based
Our Solutions Allow...

- Full compliancy with HSPD-12 and FIPS 201
- Secure and reliable forms of Identification that
  - Is issued on sound criteria for verifying an individual employee’s identity;
  - Is strong resistant to identity fraud, tampering, counterfeiting, and terrorist exploitation;
  - Can be rapidly authenticated electronically;
- Three factor authentication
- Leveraging of legacy Access Control Infrastructure
- Highly secure, robust, easy to implement, and easily maintained Systems
Our Solution Offers...

- Option of issuing cards in accordance with unique and/or specific needs - JAVA, File System, or Mediametric Memory Cards
- Centralized / Decentralized card issuance options
- Centralized / Decentralized card production options
- Centralized / Distributed Database options
- Online and/or offline operation
- Online and/or offline revocation
- Backward compatibility
- A forward migration path
PIV System Overview

- **PIV Front-End Subsystems** – PIV Card, card and biometric readers, and personal identification number (PIN) input device. The PIV cardholder interacts with these components to gain physical or logical access to the desired Federal resource.

- **PIV Card Issuance and Management Subsystem** – the components responsible for identity proofing and registration, card and key issuance and management, and the various repositories and services required as part of the verification infrastructure.

- **PIV Access Control Subsystems** – the physical and logical access control systems, the protected resources, and the authorization data.
PIV Front-End Subsystems

- Cards
- Card and Biometric Readers
- PIN Pad
64K Dual Interface Smart Cards

- Data can be access via contact, contactless, or both interfaces
- Supports T=0, T=1, and T=CL
- Supports 14443 A/B
## Topology Security Features

<table>
<thead>
<tr>
<th>Security Feature</th>
<th>Lead Time / Schedule</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rainbow (IRIS) printing – Subtle color shifting</td>
<td>Low impact</td>
<td>Medium</td>
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<tr>
<td>Layered printing</td>
<td>Low impact</td>
<td>Low</td>
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<tr>
<td>Foils hotstamp</td>
<td>Low impact</td>
<td>Low</td>
</tr>
<tr>
<td>Translucent cards</td>
<td>Low impact</td>
<td>Low</td>
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<tr>
<td>Satin or matte finishes</td>
<td>Low impact</td>
<td>Low</td>
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<tr>
<td>Unique signature panels</td>
<td>Medium impact</td>
<td>Medium</td>
</tr>
<tr>
<td>Microprinting</td>
<td>Low impact</td>
<td>Low</td>
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<tr>
<td>Unique Inks – Optically Variable Inks (OVIs)</td>
<td>High impact</td>
<td>High</td>
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<tr>
<td>Metallic Inks</td>
<td>High impact</td>
<td>High</td>
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<tr>
<td>Holographic overlays (registered and unregistered)</td>
<td>High impact</td>
<td>High</td>
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<tr>
<td>Inks, UV inks</td>
<td>Low impact</td>
<td>Low</td>
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<tr>
<td>Optically Variable Device 9OVD)</td>
<td>High impact</td>
<td>High</td>
</tr>
<tr>
<td>Unique and controlled holograms (set-up costs)</td>
<td>High impact</td>
<td>High</td>
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<tr>
<td>Color or printing magnetic stripes</td>
<td>Medium impact</td>
<td>Medium</td>
</tr>
<tr>
<td>Guilloche printing</td>
<td>Medium impact</td>
<td>Medium</td>
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**XTec Readers**

- Readers are contact, contactless, or both
- Fully Programmable
  - Standalone or Online
- Support any protocol including Wiegand, RS232, RS485 or IP
- Highly secure by providing cryptographic challenge response between the card and the reader
- Support Biometric devices such fingerprint, hand geometry and iris scan
- Built in GSA/CAC SPM
- Configurable with LCD, Pin Pad, Biometric, etc.
PIV Card Issuance and Management Subsystems

- Identity Proofing and Registration
- Card and Key Issuance and Management
- Verification Infrastructure
FIPS 201 and SP 800-73 Support
Full GSA/CAC Interoperability Support
LDAP Support
Certificate Issuance Support
BIOAPI Biometric Enrollment
Contact and Contactless Encoding
Card Printing
Card Personalization
Central / Distributed Issuance
Various Printer Support
Key Issuance and Management
Card Management Integration
Supports Standalone Access
Integrates with Access Control Systems
Photo Capture Stations

- Low Cost / High Quality
- High Resolution Camera
- Auto Crop
- Auto focus
- Portability
- Creative Lighting Solution
- Easy to use by Operator
PIV Compliant Badges

Fargo High Definition Printer / Encoder
AuthentX Credential Management System

Dedicated AuthentX™ Server

The new standard for security. The XaNode Server includes the dedicated AuthentX™ software with a high-capacity, secure LDAP server and a high-security Mediametric® SAM. Built in cryptographic board with volatile keys which will self-destruct if intrusion is detected.
PIV Access Control Subsystems

- PIV Physical Access Control Subsystem
- PIV Logical Access Control Subsystem
XNode IP Addressable Security Controller

- One (1) RS232 serial port through an RJ-11 Modular Connector, and one (1) RS485 serial communication port.
- Ethernet interface: half-duplex 10BaseT Ethernet using RJ45.
- 2 MB of battery-backed (4 hours) Random Access Memory (RAM) for secure storage of logs and access list files.
- Battery-backed (4 hours) Real Time Clock (RTC) provides year, month, day, weekday, hours, minutes, and seconds.
- 8 KB Mediametric® Memory for non-volatile storage of security data.
- Supports four (4) XBus/Weigand compatible ports.
- All inputs are ESD protected, IEC Compatible (EN61000-4) Air - 15kV, Contact - 8kV.
- Two (2) general purpose auxiliary inputs and one (1) supervised input, all suitable for tamper-detect.
- Socket for SIM/PSAM (ISO 7816 compatible).
- Power/Status LED indicator.
IP Access Control System
Access Control with controller installed locally

- Ceiling Line
- Sentrol
- Mediametric Security
- Ethernet Line
- 12x12 enclosure (lockable)
- 12 volt dc power supply with 24 hour battery back up
- Electric Strike
- CAC Reader
- Balance Magnetic Switch
- 120 Volts AC
- Secure Side of Door
Integrated Readers in Turnstiles
Logical Access Solutions

- X Tec Login GINA - Graphical Interface for Network Access
  - Replace Microsoft GINA, Capture Login ID and Password
  - Secure Smart Card Enabled
  - Multiple Login Methods
  - Optional Passcode and Biometrics
- Integrated with Physical Access
  - Integrated with Card Management System
  - Uses LDAP Bridge to synchronize databases
- Available for Windows 2000 and later
- Supports Form Fill and Digital Signature
- Supports Multiple Card Authentication Protocols
XTec – Visitor Control

- Use Visitor Drivers License for Identification
  - Read Magstripe or Barcode for Form Fill
  - Take Picture for personalized card or activate preprinted card
  - Capture / Validate / Associate ID documents with visitor
  - Send data to access system
  - Track visitor during visit
  - Keep forensic database
  - Support other Federal Cards
XTec – Professional Services

- Smart Card Engineers
- Physical Access Engineers
- Application and Integration Services
- Consulting
- Transition Planning
- Business Development
PIV II Product Available Dates

- Card Issuance and Management System - September 2005
- Physical Access Control Solution - October 2005
- Legacy Access Control Retrofit - August 2005
- Logical Access Control Solution - December 2005
- Dual Interface Smart Cards - October 2005
- Smart Card Readers - August 2005
XTEC Federal Customers

- General Services Administration (GSA)
- Department of State (DOS)
- Department of Defense (DOD – all services)
- Navy
- Air Force
- Secret Service (USSS)
- Federal Bureau of Investigation (FBI)
- Department of Treasury
- Veterans Administration (VA)
- Internal Revenue Services (IRS)
- Department of Homeland Security (DHS)
- Department of Transportation (DOT)
- Maritime Administration
- Transportation Security Administration (TSA)
- Social Security Administration (SSA)
- National Air and Space Administration (NASA)
- National Security Agency (NSA)
- Federal Aviation Administration (FAA)
- Government Accountability Office (GAO)