Future Enhancements Bring Added Capability

Multi-rate interface card allows user selectable ATM or SONET/SDH encryption at STS-3/STM-1, STS-12/STM-4 or STS-48/STM-16 without changing the line cards. (Expected Q4 2006)

Under Consideration:
- OC-192/STM-64 ATM/SONET/SDH interface card and Crypto
- Modernization features

Interoperability

FASTLANE incorporates recognized standards and is interoperable with our NSA-certified encryptor the TACLANE Classic (KG-175) while in ATM mode. FASTLANE can also be managed by GEM encryptor management software while in ATM mode.

Training and Customer Support

Classroom training is available in our Maryland training facility. Free Help Desk support is provided 24 hours a day, 7 days a week.

Standard Compliance:

General Dynamics C4 Systems is a working member of multiple standards committees. FASTLANE employs recognized open standards, including SNMP, ATM Forum UNI 4.0, PNNI 1.0, and ILMI 4.0.

Price:

Starts at $37,500

Warranty:

Comes with 12 month hardware/software warranty.

FASTLANE is a registered trademark of the National Security Agency.

TACLANE is a trademark of General Dynamics C4 Systems.

The Type 1 encryption provided by the FASTLANE is part of the Department of Defense Defense in Depth strategy. Type 1 encryption is only one portion of the overall Defense in Depth strategy, is required to ensure secure and reliable protection for sensitive and classified information.

For more information, please contact:

GDC4SE 03/15/06
Tel 781 455 2800 Fax 781 455 5555 Email infosec@gdc4s.com www.gdc4s.com/networkencryption

Secure Communications: We Bring You What's Next

LMD with KDM
GEM
FASTLANE (ATM)
45 Mb/s

Easy to Use
- Auto recovery
- Field Software Upgrades (eliminates delays and downtime)

Flexible to meet your needs
- ATM and SONET/SDH Capabilities in one Device
- Various ATM Interfaces (OC-3c, OC-12c, OC-48c, OC-192c)
- Various SONET/SDH interfaces (OC-3c, OC-12c, OC-48c)

- Encrypts multiple levels of security (one level at a time)
- Supports single user or multi-user computer-based group

High Speed Performance
- Up to 10 Gbps for ATM
- Up to 2.5 Gbps for SONET/SDH

Cost-Effective
- Uses public networks, eliminating cost for leased lines and provisioning of redundant paths

Keying
- Over-the-Network Key (OTNK) distribution and rekeying (ATM only)
- Enhanced FIREFLY (key generation)

Overview

The FASTLANE® ATM Encryptor provides high-speed, end-to-end, low-latency security for local and wide area ATM networks. FASTLANE is the fastest ATM encryptor in the world and is offered in a variety of interfaces to meet user needs. The addition of SONET/SDH path level encryption to FASTLANE is currently in development providing the additional security of link encryption.

Features and Benefits:

Type 1 Security
- NSA Certified for Top Secret and Below
- Traffic Flow Security through ATM Header field suppression/encryption
- Traffic Stuffing (creates constant level of traffic)

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By use of Master and Registration card

FSM Software Upgrades (eliminates delays and downtime)
- Supports single user or multi-user computer-based group

Easy to Use
- Auto recovery
- Field Software Upgrades (eliminates delays and downtime)

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- Over-the-Network Key (OTNK) distribution and rekeying (ATM only)
- Enhanced FIREFLY (key generation)
FASTLANE® ATM/SONET Encryptor (KG-75/75A)

Future Enhancements Bring Added Capability
Multi-rate interface card allows user selectable ATM or SONET/SDH encryption at STS-3/STM-1, STS-12/STM-4 and STS-48/STM-16 without changing the line cards. (Exported IQ 2006)

Under Consideration:
OC-192/STM-64 ATM/SONET/SDH interface card and Crypto Modernization features

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FASTLANE® ATM/SONET Encryptor (KG-75/75A)

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- Traffic Flow Security through ATM Header field suppression/encryption
- Traffic Stuffing (creates constant level of traffic)

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- ATM and SONET/SDH Capabilities in one Device

**Flexible to meet your needs**
- ATM and SONET/SDH Capabilities in one Device
- Various ATM Interfaces (OC-3c, OC-12c, OC-48c, OC-192c)
- Various SONET/SDH interfaces (OC-3c, OC-12c, OC-48c)

**High Speed Performance**
- Up to 10 Gb/s for ATM
- Up to 2.5 Gb/s for SONET/SDH

**Cost-Effective**
- Uses public networks, eliminating cost for leased lines and provisioning of redundant paths

**Keying**
- Over-the-Network Key (OTNK) distribution and rekeying (ATM only)
- Enhanced FIREFLY (key generation)

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**ATM Technical Specifications:**

<table>
<thead>
<tr>
<th>Interface</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>OC-3c (155 Mb/s)</td>
<td>Multi-mode</td>
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<tr>
<td>OC-3c (155 Mb/s)</td>
<td>Single mode</td>
</tr>
<tr>
<td>OC-12c (622 Mb/s)</td>
<td>Single mode</td>
</tr>
<tr>
<td>OC-48c (2.5 Gb/s)</td>
<td>Single mode</td>
</tr>
</tbody>
</table>

**Security Management Using GEM:**
- Centrally managed FASTLANE units
- Up to 8 Network Managers supported

**Protocols:**
- ATM Signaling: ITU Q.2931, ATMF UNI 4.0, ATMF ILMI 4.0 and PNNI 1.0 compliant

**Operator Interface:**
- Front Panel and VT Terminal

**Remote Management/Configuration via GEM**

**Maximum Number of ATM Connections:**
- 1022 active connections (channel and/or path)

**Types of Connections Supported:**
- Permanent Virtual Circuits/Paths (PVC/PVP) including soft PVCs/PVPS
- Switched Virtual Circuits/Paths (SVC/SVP)
- Point-to-point
- Point-to-multipoint
- Simplex
- Duplex

**TAP (TAM) Remover Function:**
- By use of Master and Registration card

**Key Options:**
- necklace
- Master Key CKI
- Nine (9) User CKIs

**Key Options:**
- FIREFLY or Enhanced FIREFLY
- (22 vector sets)

**Current/next on each of 10 CKIs and Master Card**
- 768 Preplaced traditional keys
- 64 current PPKs, each with 11 changeovers

**Reliability:**
- 21,000 to 25,000 Hours Mean Time Between Failure (MTBF) depending on the interface
- 25,000 to 26,000 Hours Mean Time Between Failure (MTBF) depending on the interface

**Environment:**
- 0°F to 105°F (operating)
- 0°F to 105°F (non-operating)
- 80% Humidity (non-condensing)
- MIL-STD-461D, Electromagnetic Interference (EMI)

**Certification/Approvals:**
- NSA certified for Top Secret
- Certification/Approvals: NSA certified

**Physical Characteristics:**
- Dimensions: 7.25” H x 17.50” W x 21.50” D
- Weight: approximately 35 lbs.

**Physical Characteristics:**
- Front Panel and VT Terminal
- Operator Interface:
- User Interface:
- Security Management:
- Key Management:
- Maintenance/Repair:
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