TACDS®-Low Profile (LP) v3

Enabling Secure Cross Domain Information Sharing at the Tactical Edge

TACDS®

- Lowest SWaP-C Tactical Hardware CDS in Production Today

- Meets NSA's Phase 1 Raise the Bar Requirements

- Robust Security Architecture with Hardware Enforced Domain Separation

- Approved for Bi-Directional Use between Security Domains, including between Top Secret and Secret, or Secret and Unclassified

- Cyber Guard - Protects Against Zero Day Attacks

Mission success in today's battlespace is dependent on the timely sharing of actionable information between commanders and warfighters on the front line. A Cross Domain Solution (CDS) ensures the exchange of reliable information while acting as a guard between different networks or enclaves, often at different security levels. A CDS can prevent data spillage as well as preventing malicious network traffic from crossing its boundary.

TACDS®-Low Profile (LP) is General Dynamics Mission Systems' 1U form factor tactical cross domain product that enables information sharing across different security domains at the tactical edge. TACDS-LP provides a low cost, small Size, Weight, Power, and Cost (SWaP-C), tamper-resistant CDS that is ideal for rack mounted and embedded configurations in ships and wheeled/tracked vehicles, mobile command centers, ground sensor systems, aircraft or unmanned vehicle systems.

How does it work?

TACDS-LP works by executing programmable rule sets that filter information (messages), allowing individual messages or data fields within them to be selectively passed, blocked, or changed. This method ensures data security on both networks and eliminates the need for time consuming, advanced data filtering.

RAISE THE BAR COMPLIANT

Ease of Use

- Raise the Bar Compliant

- Pluggable filter components for multiple message formats

- Raise the Bar compliant filters include: Configurable Binary with Simple Binary, PNC and UTAMS Front Ends; XML, VMF; SNMP; MISD-C; SSL

- Additional filters planned or in development include: Full Motion Video, Link 16/JREAP-C, USMTF, FDMP, FTP, SMTP and DDS

- Custom filter components available upon request

- User programmable rule sets

- Autonomous; no operator required

Robust Security Architecture

- Hardware Enforced domain separation

- Separate high and low data ports with a combined power and management port

- Anti-tamper with device zeroization built-in

- Full audit logging for all system, security and message events

- Encrypted storage of rule sets and audit logs

- Secure boot and trusted platform verification upon power up

- Authenticated, role-based device administration through management port

Professional Services

- Achieve **Confidence in your Digital World** through our architecture, integration and certification professional services, enabling you to rapidly enhance and achieve your mission.

Technical Specification

- **Physical Characteristics**
  - Dimensions: 7.6 in. x 4 in. x 1.6 in
  - Fits 1U Rack Space.
  - Weight: 1.75 lb.
  - Power: 12 - 33 VDC, 9 watts

- **Reliability**
  - Predicted MTBF >150,000 hours

- **Network Ports**
  - 10/100/1000 Ethernet
  - RS-232
  - Management Port - USB/Com

- **Protocols Supported**
  - TCP, UDP
  - Unicast, Multicast, Broadcast
  - PPP, IGMP, ARP
  - IPv4, IPv6

- **Throughput and Latency**
  - Message type and size dependent

- **Environmental Specification**
  - Operational Temperature: -40°C to 70°C
  - Storage Temperature: -51°C to 85°C
  - Operational Altitude: 0 - 65,000 ft. above sea level
  - Mechanical Shock: 40g, 11 msec, each axis
  - Vibration: Tracked and Wheeled Vehicle, Fixed and Rotary Wing Aircraft, and Gunfire
  - Fluid Contaminations: Diesel, Hydraulic, Oil, Bleach
  - Relative Humidity: 10 - 95%
  - EMI/EMC: MIL-STD-461F, RE102, CE102, CS101, CS114, CS115, CS116, RS103
  - Power: 28 VDC, MIL-STD-1275E and MIL-STD-704F

GENERAL DYNAMICS
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