Close the air gap at the tactical edge with the HAF-100X from ViaSat. Based on the field-proven ViaSat HAF-100, the pocket-sized ViaSat HAF-100X is a ruggedized Trusted Filter specifically designed for cross domain high assurance in tactical environments. This filter securely permits data to pass between tactical networks or equipment with different security classification levels, ensuring trusted information flow with no air gap.

By enforcing rigid rules as defined by a “filter policy,” the ViaSat HAF-100X ensures that only the desired data crosses the classification boundary. ViaSat can configure the filter for one-way or two-way information flow, depending on your security requirements.

When this filter is positioned in an application network, no traffic is allowed to cross from one security domain to another without going through filter review. Message filter rules define the policy to be enforced. Fixed format messages that transit the ViaSat HAF-100X are compared against the installed filter policy, so that only messages with valid format and with valid ranges of values for all fields are forwarded. Messages that fail filtering on the low-side interface are silently discarded from the viewpoint of the sender. Messages that fail filtering on the high-side interface may be silently discarded or feedback can be provided to the sender. In every case, the “event” of a dropped message is recorded for audit and forwarded to a central audit server over Syslog protocol.

The ViaSat HAF-100X also filters the rate at which valid messages are able to pass over the classification boundary, effectively limiting the ability of an adversary to exploit valid messages.

The ViaSat HAF-100X is a rule-based filter, based on ViaSat’s reprogrammable PSIAM™ security architecture, so it can be securely upgraded with new message rule sets after the product is deployed.

**TACTICAL CROSS-DOMAIN ASSURANCE**

**Compact, Rugged, and Flexible for Tactical Military Use**
- Dimensions (W x H x D) 4.45 x 1.52 x 7.96 in.
- Weight 2.8 lb
- MIL-STD-810 rugged
- Fits three across in a 1U rack
- Multiple network interface configurations possible for use with copper (standard), fiber, USB, or other network configurations with multiple connector types

**High Performance Throughput**
- Up to 10 Mbps throughput*
- 10/100 Mbps auto-sensing ethernet (IEEE 802.3)
- Low latency

**Robust Networking Features**
- Supports TCP, UDP, IPv4, and IPv6
- Supports security audit reporting over Syslog protocol (RFC 4525)
- Supports SNMP v2 and v3† monitoring

**Premium Secure Networking Solution**
- Physical protection features
- High-assurance design based on ViaSat’s PSIAM architecture

**Easy to Use**
- Simple configuration
- Network and power connections on rear
- Console and token ports on the front
**SPECIFICATIONS**

**GENERAL CHARACTERISTICS**

- **Operating Modes**: Bidirectional (both), unidirectional (high-low or low-high)

**VALIDATED RULE SETS**

- **Networking**: IP, UDP, TCP
- **Messaging**: SNMPv2, Serial over IP

**NETWORKING FEATURES AND PROTOCOLS**

- **Protocols Supported**: TCP, UDP, IPv4, IPv6
- **Management Interfaces**: CLI, SNMPv3

**NETWORK INTERFACES**

- **Copper**: IEEE 802.3, 100BASE-TX; 10/100 Mbps, copper, RJ-45
- **Copper/Fiber**: IEEE 802.3; 10/100 Mbps copper, RJ-45; IEEE 802.3z; FDDI PIM ISO / IEC 9314-3; 100 FX, 1310nm optical, LC connector
- **Wireless**: USB 2.0; Supporting channels 802.11 b/g/n: 3; Supporting channel 802.11 a: 12; 64-bit/128-bit WEP (optional); WPA2-PSK /WPA-PSK (personal)

**PHYSICAL**

- **Dimensions (W x H x D)**: 4.45 x 1.52 x 7.96 in.
- **Weight**: 2.8 lb
- **Power**: 14 W typical; 12 to 28 VDC; MIL-STD-1275D; MIL-STD-704F

**RELIABILITY AND MAINTENANCE**

- **Predicted MTBF**: 350,000 hr
- **Predicted MTTR**: 15 min
- **Other**: Extensive Power Up and online BIT

**ENVIRONMENT**

- **Temperature**
  - Operating: -40° to 60° C
  - Non-operating: -40° to 71° C
- **Humidity**: To 95% MIL-STD-810G, Method 507.5
- **Altitude**: 50,000 ft operational; 70,000 ft storage; MIL-STD-810G, Method 500.5
- **Vibration**: MIL-STD-810G, Method 514.6, Category 20 and 24; MIL-STD-167 Type 1
- **Shock**: MIL-STD-810G, Method 516.6; MIL-STD-901D Grade A Class II, Type C
- **EMI/EMC**: MIL-STD-461E
- **Rain**: Blowing rain MIL-STD-810G, Method 506.5
- **Sand/Dust**: MIL-STD-810G, Method 510.5
- **Fungus**: MIL-STD-810F, Method 508.5
- **Salt Fog**: MIL-STD-810F, Method 509.4
- **TEMPEST**: NTISSAM TEMPEST 1/92

**TYPICAL HAF-100X APPLICATION**

- **Low-side network carries**
  - Encrypted data
  - Unclassified control and status

- **HAF-100X provides high assurance separation allowing tactical computer to control unclassified elements**

**CONTACT**

**SALES**

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