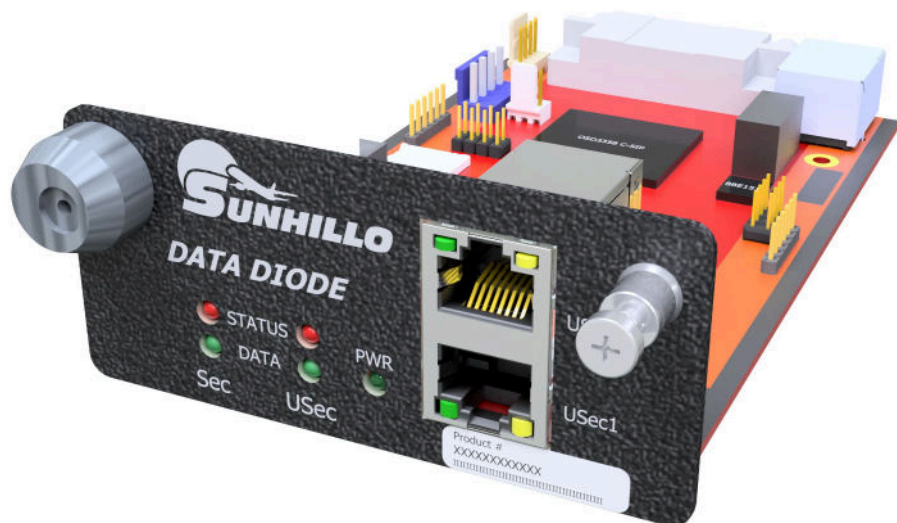


Hardware Enforced Security Protocol



Sunhillo's Brigantine Data Diode Module protects the integrity of a secure surveillance network by strictly enforcing a one-way-only flow of data from the secure network to the unsecured network.

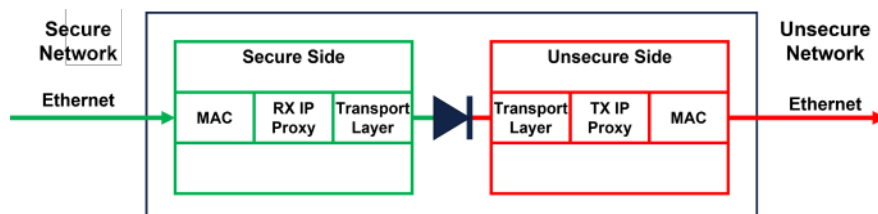
Within radar surveillance data networks, it is necessary to broadcast radar data from a secure network out onto an open, unsecure network. To fulfill this requirement without jeopardizing the safety and integrity of the secure network assets from the threats of inbound cyber-attacks, it is necessary to prevent data and control communication from the Unsecure side of the network from reaching the Secure side of the network.

The Brigantine Data Diode accomplishes this by implementing a 100% hardware-enforced security protocol that cannot be disabled or bypassed by any software means.

The Data Diode module fits directly into the expansion slot on the

Sunhillo Brigantine Surveillance Gateway Processor (SGP). The Brigantine is a dedicated 1U communication platform running Sunhillo's SureLine® software and is designed to address the requirements of new IP based systems for LAN to LAN surveillance sensor data formatting, content filtering, and protocol conversions.

Brigantine SGP hardware provides a high-speed communication platform with a primary focus on LAN infrastructure. The Brigantine SGP supports twelve (12) 1Gb Ethernet Ports and two (2) Enhanced Small Form-factor Pluggable (SFP+) ports that provide up to 10Gb Ethernet over copper or single/multi-mode fiber modules.



Features

- One-way-only data flow
- Share secure surveillance data with lower security network
- Hot-Swappable expansion module for the Brigantine
- 100Mb Ethernet throughput
- FIPS 140-3 Validated when utilized with the Brigantine

The Brigantine Data Diode uses Sunhillo's FIPS 140-3 certified cryptographic library to provide validated cryptography for the protection of sensitive information where encryption is used (i.e., https, ssh).



Front and Rear Panels



Technical Specifications

Part Number

- 070-10-DDM-S01

Data Diode

- Hardware enforced cybersecurity
- Maximum throughput: 70 Mbps based on 6000 pps with 1436 byte payload
- Maximum throughput: 10 Mbps based on 10,000 pps with 100 byte payload

Processor

- Dual TI Sitara ARM Cortex-A8 AM335x processors

Ethernet

- 10/100/10000BaseT

Security

- Evaluation Assurance Level
- Nessus Scanned

Front Panel Display

- LED Status Lights

Brigantine Power

- Power usage: 300W Max
- 100-240VAC, 50-60Hz, 5A-3A
- 1U Modular AC Power Supply
- Hot-swappable redundant configuration available

Brigantine Dimensions

- Height: 1.61in / 41mm (Standard 1U)
- Width: 19in / 482mm
- Depth: 11.25in / 285.75mm

Data Diode Module Dimensions

- Height: 1.58in / 40.13mm
- Width: 3.58in / 90.93mm
- Depth: 6.46in / 164.08mm

Environmental (Tested to MIL-STD-810G)

- Storage Temperature: -50°C to +60°C
- Operating Temperature: 0°C to +50°C
- Operating Relative Humidity Range: 10-95%, non-condensing
- Operating Altitude: -300 ft to 10,000 ft

Certifications and Compliance

- CE & UKCA Mark
- RoHS3 Directive EU 2015/863
- REACH
- FCC Part 15, Class B
- UL/CSA/IEC/EN 62368-1
- ETL for Canada and US, 3023031
- FAA-G-2100J: Power

