

# Brigantine Data Diode Module

# **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 protected network out onto an open, unprotected network. To fulfill this requirement without ieopardizing 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 lowsecurity side of the network (the low side) from reaching the highsecurity side of the network (the high side).

### 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.

The Data Diode is compatible with several different Sunhillo product lines. It is available as a plug-in module for both the Brigantine and

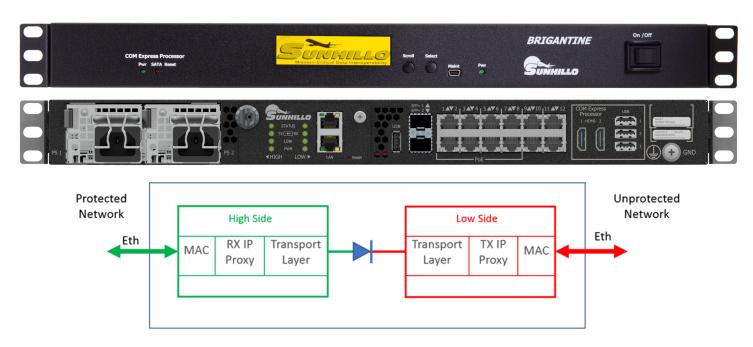
### **Features**

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

the Longport chassis, and a standalone version based on the Margate II 1U platform.



## **Front and Rear Panels**



# **Technical Specifications**

#### **Data Diode**

> Hardware enforced cybersecurity

#### **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**

- → Storage Temperature: -50°C to +60°C
- → Operating Temperature: 0°C to +50°C
- → Relative Humidity Range: 10 90%, noncondensing
- → Operating Altitude: -300' to 10,000' per MIL-STD-810G

#### **Certifications and Compliance**

- → CE Marking
- → FCC Part 15, Class B
- RoHS2 Directive 2011/65/EU, as amended to EU 2015/863
- > ETL for Canada and US, 3023031
- → UL/CSA/IEC/EN 62368-1

#### MTBF at 30°C

- → Brigantine Single Power Supply: 227,204 hours
- → Brigantine Dual Power Supply: 229,499 hours
- → Brigantine Com Express Dual Power Supply: 182,639

