# **Owl Data Diodes for GE® Historian** Hardware Enforced Cybersecurity for Data Collection and Storage



### **Overview**

Historian from GE<sup>®</sup> Digital is a best-in-class historian software solution that collects your industrial time-series data needed to analyze asset and process performance so you can drive greater business value. Owl data diodes enable the secure one-way transfer of GE Historian data to a secure operations center, ensuring that operational assets are not compromised during the one-way transfer.

### **Simple and Hardware Enforced**

Owl's hardware-enforced data diode cybersecurity products are built from the ground up for seamless data availability and unhackable security. They are designed to provide deterministic data transfer in only one direction to segment and protect networks, devices, and other digital assets (databases, historians, SCADA, PLCs, DCS, etc.) from external threats. Owl offers the industry's most flexible line of data diode cybersecurity products. Customers can choose from the appropriate hardware platform and form factor, which includes a base software package, and then select optional add-on software modules to meet their solution needs.

## **Focused Functionalities for GE Historian**

#### **KEY FEATURES**

- Physically secured for data collection and storage in the GE Historian
- Fastest throughput Owl solutions range from 5 Mbps up to industry leading 10 Gbps
- Unhackable hardware eliminates cyber threats and attackers from tampering
- Compliant with NERC-CIP and NIST
- Common Criteria EAL certified
- Full functionality embodied in a single device
- Low SWaP (Size, Weight, and Power)

Owl data diodes for GE Historian use hardware-enforced one-way transfer to securely collect data from on-premise and cloud-based technologies. When integrated with GE Historian, Owl's data diode technology ensures that operational data is securely collected via one-way transfer into the historian. Data that is stored in the historian remains secure even after collection due to the physical security that an Owl data diode provides.

In the case of GE Historian data transfer, file transfer is a preferred method. Real-time historian database entries are collected as a file over a user-configurable time period. The file is sent to a directory on the Send-only server "side" of the OPDS 1U integrated platform. The file then transferred via OPDS data diodes across the Owl non-routable protocol break to the OPDS Receive-only server "side," and on to a corporate network Historian or to another operator system for analysis.



OWL ADVANTAGE THE GOLD STANDARD IN DATA DIODE TECHNOLOGY



Over the last 20 years, Owl has been developing and refining data diode technologies, consistently well ahead of any other competing solution. Owl solutions feature transfer rates at up to an industry-leading 10 gigabits per second. In addition, the reliability, high bandwidth, and low latency of Owl solutions means packets never require retransmission, creating highly tuned and optimized solutions with zero data loss when operating within the specified bandwidth rate.

#### SOFTWARE MODULE COMPATIBILITY

- + OPC Transfer
- + Modbus
- + Screen Replication
- + SQL Database Transfer
- + Remote File Transfer (RFTS)
- + Log File Transfer
- + Owl Performance Management (OPMS)

#### FILE AND PROTOCOL SUPPORT

- + UDP
- + TCP/IP
- + SNMP
- + SMTP
- + FTP

**OWL** Cyber Defense

Owl Cyber Defense Solutions, LLC leads the world in data diode and cross domain network cybersecurity. With a constant focus on customers in the military, government, critical infrastructure, and commercial communities, Owl develops market-first, one-way data transfer products to meet a variety of operational needs, from entry level to enterprise.

For more information on Owl, or to schedule a demo, visit www.owlcyberdefense.com



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