OPDS-100
Perimeter Defense Solution

The Owl Solution

The OPDS-100 is an entry level, all in one, 1U rack mountable cybersecurity solution designed to create a defensive cyber perimeter around plants. Optimized for more demanding industrial control applications, the OPDS-100 supports software interfaces (connectors) to a broad range of applications that generate business critical data (sensor information, data points, database historians, syslog messages, alarms, etc.). That data is securely transferred to the business network and used for remote monitoring, production planning, and other management tasks.

Licensable bandwidth tiers allow customers to purchase only the bandwidth they need with the knowledge that they can increase bandwidth at any time by moving up to the next tier.

Entry Level without Sacrifice

OPDS-100 is Owl's entry level 1U rackmount cybersecurity product. It offers a low, entry level price point without sacrificing functionality, capability or expandability. Designed to support multiple data flows and protocols simultaneously, with expandable bandwidth license keys, no other product on the market offers the same range of capabilities in a single, easily deployable device. See the "Software Interfaces" section for a list of all the different protocols and vendors we support.

Entry Level. Expandable. Single Device. Easily Deployed.

Serving the cybersecurity needs of a number of commercial and critical infrastructure markets (oil & gas, utilities, power generation, financial services, etc.) the Owl Perimeter Defense Solution (OPDS) product family supports a variety of standards based and vendor specific interfaces. Designed to protect the industrial control systems found at refineries, substations, plants, pumping stations, manufacturing facilities, etc., the OPDS-100 ensures cyber protection of digital assets within the plant and deterministic one-way only transfer of operational data to end-users outside of the plant.
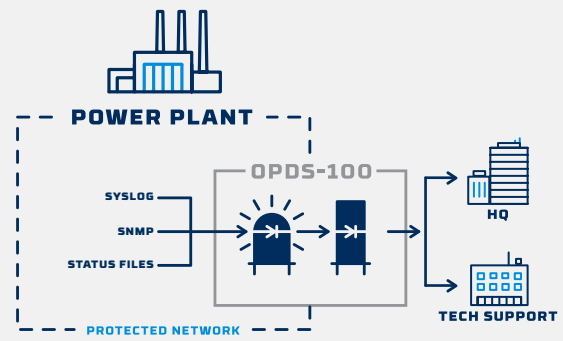
Adaptable Deployment Options

Popular with customers that have single transfer needs, the OPDS-100 provides a spectrum of transfer interfaces to choose from. Customers select the type of data they want to securely move and Owl ships the solution ready to deploy. And if new needs arise, the system can be easily configured to address them. The OPDS-100 even comes in a configuration with a built in V.92 modem for those facilities requiring dial-up access.

Flexible Bandwidth Tiers

The OPDS-100 supports a maximum of 104 Mbps but also provides for a number different throughput tiers depending on customer needs. Customers can select from 10 Mbps, 26 Mbps, 52 Mbps, 104 Mbps for their starting configuration, and as a customer's bandwidth requirements increase, they can easily upgrade to a new license to meet those needs.

USE CASE

SECURE REMOTE MONITORING

Power plants operating 24/7 require monitoring 24/7 and many times remote monitoring is more convenient and cost effective. A number of Owl customers are using the OPDS-100 to remotely monitor their plants. The OPDS-100 sits on the network security perimeter preventing any cybersecurity attacks against the plant. At the same time monitoring information in the form of files, Syslog messages, historian replication, SNMP traps, email notifications, etc., is transferred across the OPDS-100 data diode. We refer to this as "remote monitoring without remote access". The plant is secure but end-users are monitoring system performance, production metrics, health and safety alerts, equipment maintenance levels and just about any other data point.

Software Interfaces

OPDS-100, like all OPDS products, supports a wide range of data formats and transport layer protocols including:

Email (SMTP), FTP/SFTP, Modbus, OPC Foundation (DA, A&E), Remote File Transfer (alarms, events), Remote HMI Screen Replication, SQL Database replication, SNMP Traps, Syslog, TCP transfers, UDP transfers (multicast, unicast).

In addition industrial control solutions from a number of different vendors are also supported, including:

Fox Guard Patch Management, GE Proficy Historian, GE OSM Support, OSIsoft PI System, PAS Alarm Management, Rockwell Automation – RSLinx Classic, FactoryTalk Gateway, FactoryTalk Historian, Rolls Royce PMS, Schneider Electric – RemoteWatch, Wonderware eDNA, Wonderware Historian, Scientech R*Time

Technical Specifications

OPERATING CONDITIONS:
- 32°F to +110°F
- 0°C to +43.33°C
- 5% to 90% humidity non-condensing

POWER SUPPLY:
- Input: 75-230 VAC,
- Estimated normal operating usage 10-16 W per side
- Max. 20W per side

STORAGE:
- -40°F to 158°F
- -40°C to 70°C
- 5% to 90% humidity non-condensing

VIBRATION:
- Vibration: (IEC 60255-21-1)
- Vibration 1g (10-500Hz) (Operational)
- Vibration 2g (10-500Hz) (Operational and Non-Operational)

CHASSIS
- Black anodized aluminum with locking top

MOUNTING SYSTEM:
- (1U) Rackmount, tabletop

NETWORK CONNECTIVITY:
- Ethernet connection for network traffic
- Physical connectors: 8P8C (RJ45)
- Supports speeds of: 10 Mbps, 26 Mbps, 52 Mbps, & 104 Mbps

COOLING SYSTEM:
- Conductive cooling through enclosure side walls with high life expectancy/low noise fans

SHOCK:
- Shock: (IEC 60255-21-2)
- Shock 10g 11ms (Operational)
- Shock 30g 11ms (Operational and Non-Operational)

APPROVALS:
- FCC Class A compliance
  CE Mark
  CB Certificate: 72161659
  UL 60950-1:2007 R10.14
  CAN/CSA-C22.2 NO.60950-1-07+A1:2011+A2:2014
- International Common Criteria Certification - EAL Certified
- VCCI

ISO:
- Manufactured using ISO 9001:2015 certified quality program

CHASSIS SIZE:
- 16.5" W x 1.75" H x 13" D
- 41.91 cm x 4.5 cm x 33 cm

UNIT WEIGHT:
- 7.92 lbs./3.6 kg.

MEAN TIME BETWEEN FAILURE (MTBF):
- 11+ years

LOCAL ADMINISTRATION:
- VGA connector for monitor
- USB connectors for keyboard and mouse

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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