

Owl Talon Torrent®

1U Data Diode

Low Latency, High-Speed One-Way Transfer Up to 10Gbps



Key Features

- Secure, hardware-enforced, one-way data transfers
- Transfer multiple high-speed simultaneous data types and protocols via 16 independent channels on a single device
- Compatible with Owl Talon software platform for easy-to-use, web-based user interface
- Long-lasting, set-and-forget reliability
- U.S. Government evaluated and listed Protocol Filtering Diode (PFD)
- Up to 10 Gbps max throughput
- Advanced security features including TPM binding, SELinux enforcement, STIG-compliant OS, BIOS password, and disk encryption
- Coming Soon: High Availability (HA) support

Supported Protocols

- High-Speed TCP (HS-TCP)
- High-Speed UDP
- Remote File Transfer Service (RFTS)
- SSH File Transfer Protocol (SFTP)
- Syslog
- HTTP/HTTPS

Owl Talon®: The Data Diode, Reinvented.

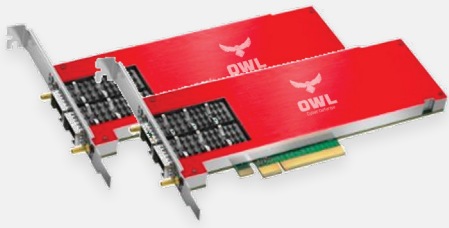
Backed by 25+ years of one-way networking expertise, Owl Talon® is a high-assurance data diode platform engineered to deliver the security, agility, and scalability critical operations demand. Its intuitive interface and flexible support for diverse environments enable fast, easy configuration and unmatched interoperability, while multiple layers of security ensure uncompromising one-way data transfer across critical network boundaries. Owl Talon's new Extensibility Framework enables organizations to realize custom features at the speed of business, without compromising the trusted security Owl Talon is known for.

Owl Talon Torrent®: Ultra High-Speed Protocol Filtering Diodes

Owl Talon Torrent protocol filtering diodes (PFD) are the latest, revolutionized data diode series Owl's portfolio, representing the pinnacle of performance in data diode technology. Owl Talon Torrent data diodes deliver U.S. Government-validated, hardware-enforced one-way protection at speeds up to 100 Gbps, backed by an FPGA-based architecture built for low latency and the most demanding, ultra-high throughput environments.

Owl Talon Torrent®: 1U

Owl Talon Torrent: 1U is a highly integrated, all-in-one, 19" rack-mountable appliance that leverages the Supermicro Twin SuperServer hardware platform, Owl Talon® software platform, and Owl Talon Torrent data diode card kit to provide secure, high speed one-way data transfers at up to 10 Gbps. The PFD delivers U.S. Government-validated, hardware-enforced, protocol-aware one-way data transfer at speeds up to 10 Gbps. Its extensible foundation supports a broad range of OT and IT protocols and applications, making it well suited for high-speed use cases like database replication, log forwarding, file transfer, and secure data movement between critical infrastructure and enterprise networks, all without compromising the one-way protection mission-critical environments depend on.



Owl Talon Torrent® Data Diode Card Kit

The Owl Talon Torrent Data Diode Card Kit is comprised of two commercial PCIe network interface cards (one send, one receive) connected via a one-way-only fiber optic cable (for transfer between cards). Each individual card is installed on a separate host server within the 1U chassis envelope. The Owl Talon Torrent Data Diode Card Kit facilitates high bandwidth, low latency one-way transfer at up to 100 Gbps.

Technical Specifications

Supermicro Twin SuperServer SYS-120TP-DTTR

Case

19" 1U Rackmount Chassis

Dimensions

Height:

1.7 inches (43 mm)

Width:

17.25 inches (438 mm)

Depth:

28.25 inches (718 mm)

Security

Hardware:

Trusted Platform Module (TPM) 2.0

Silicon Root of Trust (RoT) – NIST

800-193 Compliant

Features:

Cryptographically Signed Firmware

Secure Boot

Secure Firmware Updates

Automatic Firmware Recovery

System Lockdown

16 independent channels that automatically adapt to overall bandwidth requirements

Operating Environment

Environmental Specs:

Operating Temperature: 10°C to 35°C (50°F to 95°F)

Non-operating Temperature: -40°C to 60°C (-40°F to 140°F)

Operating Relative Humidity: 8% to 90% (non-condensing)

Non-operating Relative Humidity: 5% to 95% (non-condensing)

Approvals/Certifications

U.S. Government Diode Evaluation completed (2026)



Unmatched Ease of Use

Featuring a modern, web-based user interface, the Owl Talon software platform is extremely easy to use. In just minutes, you can configure your data flows from source to destination, getting you up and running faster than ever before.



Talon 3 User Interface



Owl Cyber Defense Solutions, LLC, headquartered in Columbia, MD, is a pure play cybersecurity company solely focused on purpose-built, made-in-the-USA data diode and cross domain solutions. Trusted to protect the most sensitive government and commercial networks worldwide, our technologies are developed and manufactured to meet the strictest U.S. security standards. Owl enables secure, near-instantaneous collaboration across network boundaries—powering faster, safer, and smarter decisions for military, federal, and commercial critical infrastructure organizations. With a focus on scalability, interoperability, and regulatory compliance, Owl ensures resilient communication in the most high-threat environments. Rigorously tested. Globally trusted.

Visit www.owlcyberdefense.com or contact us at info@owlcyberdefense.com for more details.

