

## Accredited. Proven. Secure.

In the tactical theatre, video and other UDP-based intelligence data is often accumulated in unclassified environments (sensors, vehicles, UAVs, vessels). To reach classified-level analysts, the data must securely cross network domain boundaries. This requires a proven, high-bandwidth Cross Domain Solution (CDS) that transfers streaming full-motion video and metadata at real-time from the field to secure enclaves.

### The Owl Solution

The Owl OCDS-ST06 moves UDP packets containing MPEG-TS video from Unclassified to Secret network domains with minimal latency and without data loss. Tested in deployment and fully operational, the OCDS-ST06 is UCDSMO baseline-listed and received ATO (Authorization to Operate) in February, 2015. The OCDS-ST06 presents a configurable number of UDP inlet sockets to the source network. UDP payload content is restricted to MPEG-TS packets containing full-motion video and KLV metadata. The Owl MPEG data filters explicitly check MPEG-TS packet framing, MPEG-TS protocol, and KLV metadata conformance to MISB standards.

Available in a small form factor (SFF) variant, OCDS-ST06 is housed in a 19" 1U rack-mountable chassis. It delivers total network isolation and discrete domain separation with bandwidth ranging from 26 Mbps up to 1000 Mbps. In situations that require a smaller size, less weight, and/or a lower power draw (low SWaP), the OCDS-ST06 is an ideal cybersecurity solution.



OCDS-ST06



### Highly Secure Configuration

OCDS-ST06 is configured solely for a single mission: to provide certifiable, hardware-enforced one-way transfer of UDP streams.

Operating on a locked-down RHEL OS, the OCDS-ST06 features a closed hardware architecture, and trusts no outside connection. It is deployed with a STIG-compliant Certifiable Linux Integration Platform-based (CLIP) operating system with SELinux in enforcing mode, which does not permit any backchannel communication.



### Accredited Variants

Developed to meet the strict transfer requirements of the US military and intelligence agencies, the Owl OCDS-ST06 is UCDSMO baseline-listed, and may be included within cross domain solutions that require accreditation in operational deployment. It offers clients a proven CDS with shorter paths and lower costs associated with accreditation. In addition, Owl offers accreditation services to create accredited variants by tailoring existing solutions, like the OCDS-ST06 or OCDS-FT01, to meet evolving mission or program requirements.

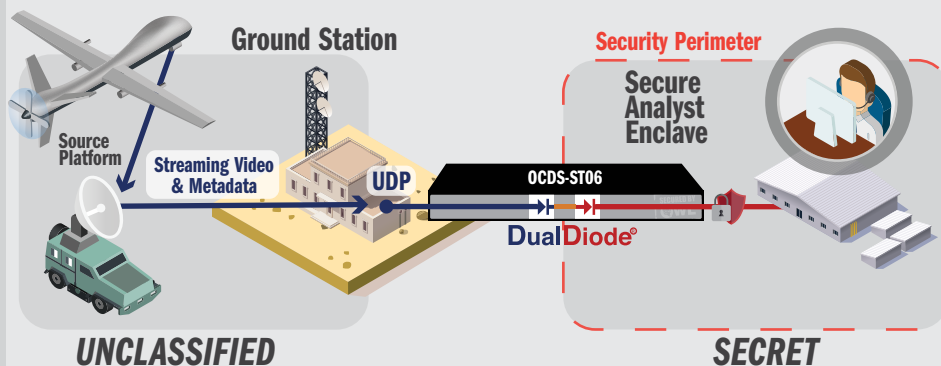


### What is DualDiode® Technology?

DualDiode® products are engineered to segment and isolate networks that simply cannot afford to be compromised. This patented hardware design allows data to flow in only one direction. Utilizing a true protocol break, DualDiode Technology conceals all IP and MAC address information and prevents network probes. The compact, all-in-one design of Owl products, their high bandwidth throughput, and the range of data types supported provide unrivaled flexibility, reliability, and security to easily support nearly any CDS application.

### USE CASE: OCDS-ST06 in Action

UAV field assets supporting ISR activities transfer full-motion video data as UDP packets to the ground station. The Owl OCDS-ST06, installed at the ground station, takes multiple inbound UDP streams and multiplexes them into one stream for transfer across the domain boundaries to the Secret network. The proprietary data diode applies filters to the remotely-collected unclassified video and metadata, and securely streams it to analysts at the Secret enclave.



## Technical Specifications

- **Operating Conditions:** 32°F to 110°F (0°C to 43.33°C) – 20% to 85% humidity non-condensing
  - **Power Supply:**
    - **Input:** 100-240V AC auto-ranging, min. 30W per side (fused at 1A at IEC connector)
    - **Output:** 5V at 5A
    - EU & UK power cables available upon request
  - **Power Consumption:**
    - **BLUE** Inlet Send-only side: 20W Max / 17.6W Nominal / 5.5W Standby
    - **RED** Outlet Receive-only side: 20W Max / 17.5W Nominal / 5.5W Standby
  - **Storage:** -40°F to 158°F (-40°C to 70°C) – 5% to 95% humidity non-condensing
  - **Safety Standards:** UL60950-1, TUV EN60950-1 approved
  - **Transport Testing:** Random Vibration and Loose Cargo Transportation Tests -- MIL-STD-810F
  - **Chassis:** Black anodized aluminum
  - **Cooling System:** High-efficiency fan system with low system acoustic noise level
  - **Chassis Size:** 16.5" W x 1.75" H x 13" D (41.91 cm W x 4.5 cm H x 33 cm D)
  - **Unit Weight:** 7.92 lbs (3.6 kg)
  - **Shipping Size:** 18" W x 8.5" H x 15" D (45.7 cm W x 21.6 cm H x 38.1 cm D)
  - **Shipping Weight:** 12.2 lbs (5.5 kg)
- \* Solution includes two DVD drives (with power supplies and network cables) for use with software updates and backups*



**OCDS-ST06 (Back View)**

## About Owl

With over 2000 deployments globally, Owl Computing Technologies is the leader in data diode cybersecurity solutions, enabling hardware-enforced network segmentation and deterministic, one-way transfer of all data types and file sizes. U.S. owned and operated, Owl offers validated and accredited products, servicing the intelligence, military, government, and critical infrastructure communities.