

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 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 received ATO (Authorization to Operate) on 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.



FLEXIBLE THROUGHPUTS

Developed to meet the strict transfer requirements of the US military and intelligence agencies, the OCDS-ST06 is accredited and in current use, 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, to meet evolving mission or program requirements.

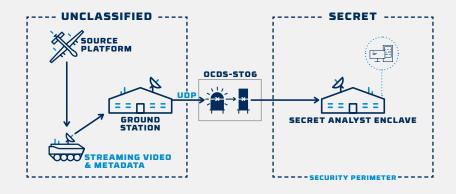
NEXT SPEED GENERATION

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.

OCDS-STO6 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

*Solution includes two DVD drives (with power supplies and network cables) for use with software updates and backups.

TRANSPORT TESTING

• Random Vibration and Loose Cargo Transportation Tests -- MIL-STD-810F

CHASSIS

• Black anodized aluminum

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 WEIGHT

• 12.2 lbs (5.5 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)



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





