

HARDWARE-ENFORCED CROSS-DOMAIN GATEWAY

Cross-Domain Data Transfer

Hardware data diode protection for your most confidential domains, enabling controlled, high assurance data and file exchange between security levels.

OWA-3U-1G



Controlled exchange across security domains

Public / Lower-Trust EXPOSED ZONE

- Public interfaces
- Exposed mission systems
- Network threats

SCAN &
FILTER

OWA Gateway CROSS-DOMAIN CORE

OWA-3U-1G

Optical diode, deep file inspection, dual antivirus.

REVERSE
VIA 2X OWA

CROSS-DOMAIN DATA TRANSFER

Classified Domains SECRET / TOP SECRET

- Classified apps & vaults
- Sensitive databases
- Mission networks

What is the OWA-3U-1G

The **OWA-3U-1G Gov & Defense Edition** is a high-assurance, hardware-enforced cross-domain gateway built for high performance and reliability. It enables controlled data and file exchange between environments of different security levels at sustained rates of 1+ Gbps, enforcing strict physical unidirectionality while also supporting **bidirectional asynchronous** file and data transfer.

Its secure-by-design architecture allows high-confidence data release through deep file inspection, advanced filtering policies, and dual anti-malware controls operating at fiber speed, with no packet loss or data corruption. Built for the most demanding government and defense environments and able to integrate an optional ANSSI-qualified or **up-to-EAL7-certified** data diode, the OWA line gives you a trusted foundation for cross-domain data exchange while preserving confidentiality, integrity, availability, and accreditation constraints

Arista Cyber delivers, deploys, and supports the OWA platform across North America in partnership with **Cyberium**, the manufacturer of the technology. Learn more at cyberium.io

KEY CHARACTERISTICS



True Bandwidth

A sustained 1+ Gbps on a single link, optimized for encrypted file transfer



Strict Unidirectionality, Both Ways

No returning data link, not even for flow control. Supports bidirectional asynchronous data flows in total security. (2)



Deep Malware Deletion

Two-layer real-time virus inspection detects and deletes 95% of malware at fiber speed.



Absolute Reliability

Zero packet loss, zero file loss, zero file corruption, automatic traffic recovery, and above-grade MTBF.



Seamless Deployment

Transparent to end users with no network change. Easy administration and no added workload.



Compliance up to EAL7+

Choose among optical data diode options that provide the certification level you need, up to Common Criteria EAL7+. (1)



Complete Physical Separation

Upstream and downstream proxies remain 100% physically separated.



Advanced Filtering & Signature

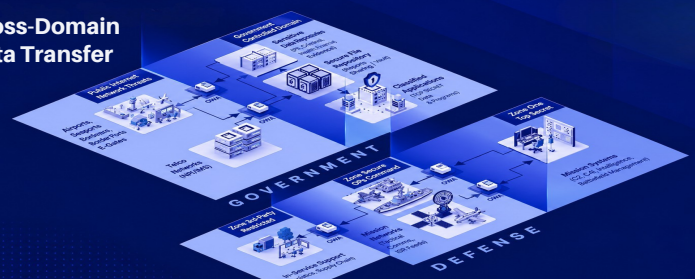
Per-file and per-file-type XML content filtering and digital signature, with easy support for tailored filtering rules.



IT Protocols Compatibility

A wide range of protocols and file systems supported. Full list on the back.

Cross-Domain Data Transfer



• HARDWARE APPLIANCE

FIGURES ARE PER PROXY SERVER, WITHOUT THE DATA DIODE

Mounting	19" rack, sliding rails and rack kit included. 2U rack space for the two proxies, plus 1U (optional) for the optical data diode.
Dimensions	H 42.8 mm × W 482 mm × D 548.13 mm
Weight	13.23 kg / 29.17 lb
Operating temp.	5 °C to 45 °C (41 °F to 113 °F), no direct sunlight on the equipment.
Standards / MTBF	Enterprise-class mission-critical hardware. MTBF > 50,000 hr.
Electrical / power	100-240 V AC. Avg. consumption 250 W. 2 × 600 W PSU.

• NETWORK & CONNECTIVITY

Ports / interfaces	4 × 1/10 Gbps (SFP+), 2 × 1 Gbps (copper), per proxy server.
USB / other	2 × USB port, 1 × VGA port, per proxy server.
Max throughput	1+ Gbps sustained. True deliverable end-to-end capacity.
File benchmark	More than 1,000 files of 125 KB per second at 1 Gbps. Max file size 100 GB, upgradable.

• PROTOCOLS

Optical link	MQTT, UDP, HTTP/S API, SMTP.
Operating system	FTP, SFTP, FTP/S/ES.
Operating system	MS SQL / Oracle database replication (incremental backups). SQL real-time data replication (changes).

Technical Specifications

• SECURITY COMPONENTS

Supported scenarios	1. Public or lower-trust to protected/confidential (with A/V and filtering). 2. Protected/confidential to public or lower-trust (with optional filtering). 3. Asynchronous bidirectional (half-duplex) combination of 1 and 2 (2x OWA).
Optical diode (1U option)	Thales ELIPS SD (passive, ANSSI FR / eq. EAL7+). Sentyron 10G (active, EAL7+). Allentis Tapics (passive, ANSSI FR). (1)
Antivirus	Dual A/V scanning with deep file inspection, powered by Bitdefender and ClamAV engines.
File filtering	Based on true file-type detection and JSON/XML content inspection.
Operating system	Hardened OS based on AlmaLinux SE

• MANAGEABILITY & RESILIENCE

High availability	Active/Active automated failover with the purchase of a second OWA appliance, plus a High Availability option.
Traffic buffering	Up to 1 day (2) of automatic replay if the downstream network is unavailable.
Monitoring	Via Syslog or a Web GUI central console for traffic, health, and performance, downstream of the proxies
Logging	Every configuration change and all traffic is logged.
Admin accounts	Separated across the upstream and downstream proxies.
Config save / restore	Locally, on USB, or over the network

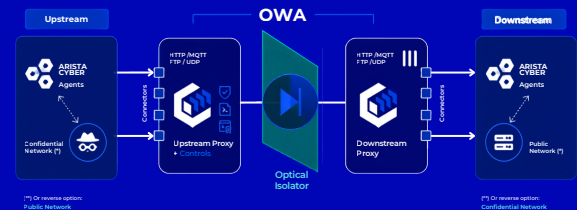
Gov & Defense Portfolio Overview

	OWA-3U-1G 1 Gbps · this datasheet	OWA-3U-10G 10 Gbps	OWA-3U-25G 25 Gbps
Platform	1 Gbps platform for standard cross domain exchange.		Extreme-performance platform for 10 Gbps to 25 Gbps transfers and large data volumes in real time.
Throughput	1+ Gbps sustained.		10 Gbps sustained.
Security guarantees	Both platforms deliver low, deterministic latency and the same hardware-enforced security, so performance scales without compromising security or reliability. Optional ANSSI-qualified or up-to-EAL7+ certified data diode.		

How it works

UPSTREAM → OPTICAL ISOLATOR → DOWNSTREAM

UNIDIRECTIONAL OPTICAL ISOLATOR



(1) Option subject to prior regulatory approval. (2) Buffer capacities are based on an average traffic load at 1 Gbps bandwidth. The OWA-3U-1G is fully compatible with Cyberium Agents, an exclusive suite of OT/IT software replicator agents. See the Cyberium OWA Agents datasheet for more

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