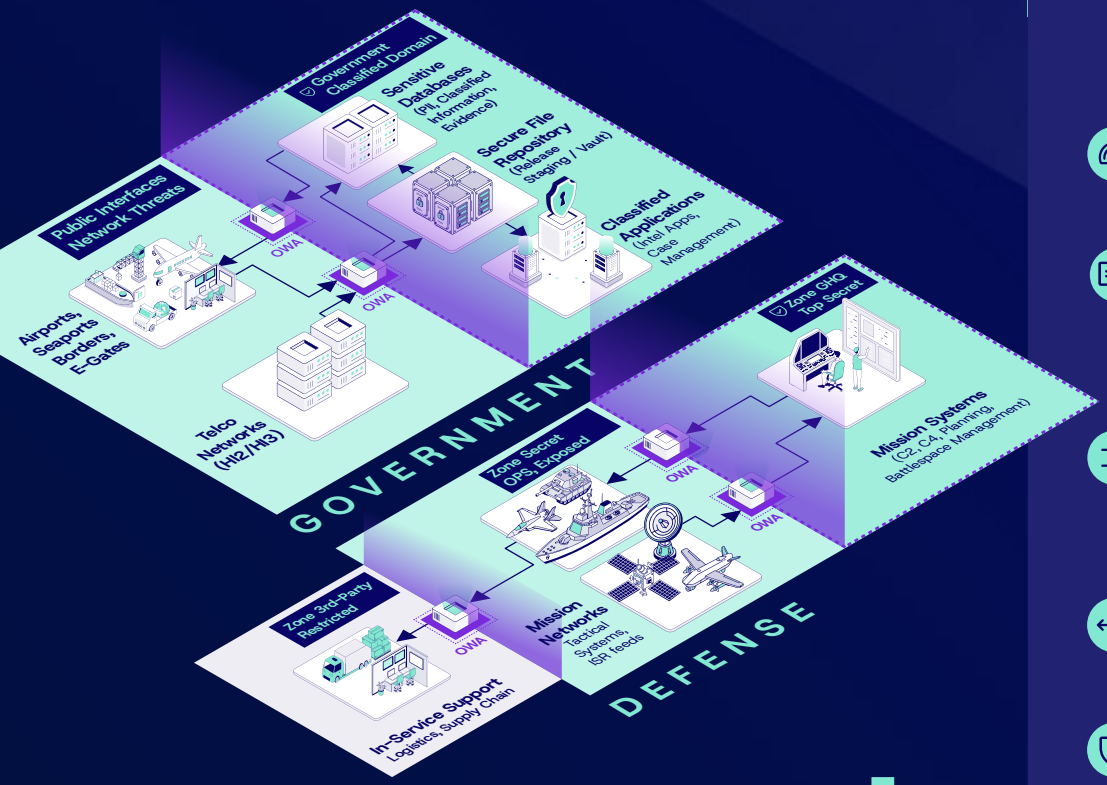
Cyberium

Cross-Domain Data Transfer



Hardware Data Diode protection for your most confidential Domains while enabling secure data transfer

What is OWA-3U-1G

OWA-3U-1G **GOV & Defense Edition** is a high-assurance, hardware-enforced Cross-Domain Gateway designed for high performance and reliability, enabling controlled data and file exchange between environments of different security levels at sustained rates from 1+ Gbps. It enforces strict physical unidirectionality, while also supporting bidirectional asynchronous file and data transfer. It thus ensures full operational capabilities combined with air-gap-grade isolation security that software-based guards and firewalls cannot match.

Its secure-by-design architecture enables high-confidence data release through deep file inspection, advanced file filtering policies, and dual anti-malware controls operating at fiber speed, without introducing packet loss or data corruption. Built for the most demanding governmental and defense environments, and integrating an optional ANSSI-qualified or up-to-EAL7+ certified Data Diode, Cyberium's OWA product line provides a trusted foundation for Cross-Domain Data Exchange while preserving confidentiality, integrity, availability, and accreditation constraints.

OWA-3U-1G

DATASHEET
GOV & DEFENSE EDITION

KEY CHARACTERISTICS

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

Compliance up to EAL7+
Choose between various optical Data Diode options, providing the desired certification level **up to Common Criteria EAL7+** (1)

Strict Unidirectionality, Both Ways
No returning data link, not even on a separate channel for flow control.
Supports bidirectional asynchronous data flows in total security (2)

Complete Physical Separation
Upstream and downstream proxies remain 100% physically separated

Deep Malware deletion
2-layer real-time virus inspection detects and deletes 95% of malware at fiber speed

Advanced Filtering & Signature
Multiple per-file or per-file-type, XML-based content filtering and Digital Signature. Eased support for tailored filtering mechanisms

Absolute Reliability
- 0-packet loss, 0-file loss, and 0-file corruption
- Automatic traffic recovery
- Above-grade MTBF

IT Protocols Compatibility
A vast range of protocols and file systems supported. See a full list at the back

Seamless Deployment
Transparent to end-users.
No change in the network. Easy admin. No extra workload for administrators.

(1) Subject to eligibility – please get in touch with us
(2) Requires a 2nd OWA product for the return link

Technical Specs

HARDWARE APPLIANCE

Ordering SKU	OWA-3U-1G
Mounting Rack	19" Rack Mounting, Rack kit included, Sliding rails. 2U Rack Space for the two proxies + 1U (optional) for the Optical Data Diode
Dimensions & Weight Per proxy server, without Data Diode	H 42.8 mm W 482 mm D 548.13 mm 13.23 Kg / 29,17 Lb
Operating T°	5 °C to 45 °C (41 °F to 113 °F) with no direct sunlight on the equipment
Standards	Enterprise-Class Mission-Critical Hardware MTBF > 50 000 hr
Electrical/ Power Per proxy server	100-240 V AC - Avg consumption: 250 W 2× 600 W PSU

NETWORK & CONNECTIVITY

Port / Interfaces Per proxy server	4× 1/10 Gbps (SFP+), 2× 1 Gbps (Copper)
USB / Other Per proxy server	2x USB-port, 1x VGA-port
Max end-to-end Throughput	10 to 25 Gbps (depending on the chosen version) - True deliverable capacity
File Sending Benchmark	Above 1000 files of 125 KB sent /sec at 1 Gbps. Max file size 100 GB, upgradable.

PROTOCOLS

IT Protocols	MQTT, UDP, HTTP/S API, SMTP
File Transfer	FTP / SFTP / FTPS/ES
Data Transfer	MS SQL / Oracle Database Replication (Incremental Backups) SQL Real Time Data Replication (Changes)

SECURITY COMPONENTS

Supported scenarios	**1.** Public/Lower trust network to Protected or Confidential network (with A/V and filtering) **2.** Protected/Confidential network to Public or Lower trust network (with optional filtering) **3.** Asynchronous bi-directional (half-duplex) combination of scenarios 1. and 2. (2x OWA)
Included Optical Diode - 1U option	Thalès Elips (passive - ANSSI FR / eq. EAL 7+) (1) Sentyron 10 G (active - EAL 7+) (1) Allentis Tapics (passive - ANSSI FR)
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
OS	Hardened OS based on AlmaLinux SE

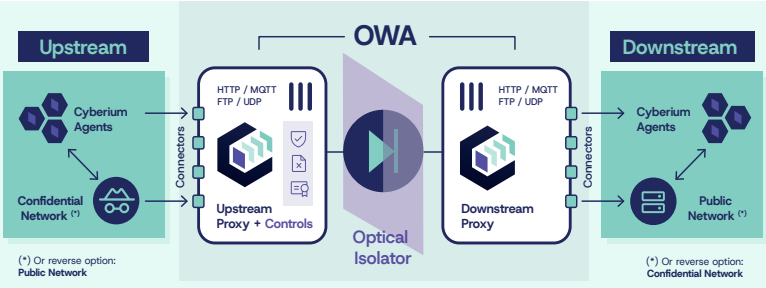
MANAGEABILITY & RESILIENCE

High Availability	Active/Active - automated fail-over with the purchase of a second OWA appliance + High Availability Option
Traffic Buffering	Up to 1-day(2) automatic replay of past traffic in case of downstream network unavailability
Solution Monitoring	Either through Syslog OR Web GUI central console enables monitoring of traffic, health and performances, downstream of the proxy appliances
Logging	Every configuration change and every traffic is logged
Administration Account	Separated on the upstream and downstream proxies
Config. saving / restore	Locally, on USB or on the network

How does it work

OWA / AGENTS combined architecture:

OWA-3U-1G is entirely compatible with Cyberium AGENTS, an exclusive Suite of Software Replicator Agents
_ See Cyberium OWA AGENTS Datasheet for more details



Gov Portfolio Overview

>Current Datasheet

✓ OWA-3U-1G — 1 Gbps

See also

OWA-3U-10G — 10 Gbps

OWA-3U-25G — 25 Gbps

The OWA **Gov & Defense Edition** product line relies on two primary hardware platforms: one engineered for 1 Gbps environments, and a extremely high-performance platform supporting 10 Gbps up to 25 Gbps data transfers. This architecture enables a scalable response to a broad spectrum of operational requirements, from standard data exchange to highly demanding use cases involving large data volumes at real-time. Both platforms deliver sustained throughput, low and deterministic latency, and the same hardware-enforced security guarantees, allowing performance to scale without compromising security or reliability.

(1) Option subject to prior regulatory approval.
(2) Buffer capacities are calculated based on an average traffic load at 1 Gbps bandwidth.

Cyberium

We secure the critical
— connecting what should stay isolated

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