Arbit Data Diode

CYBERSECURITY™
MADE IN EUROPE

Fast, hardware-based network security

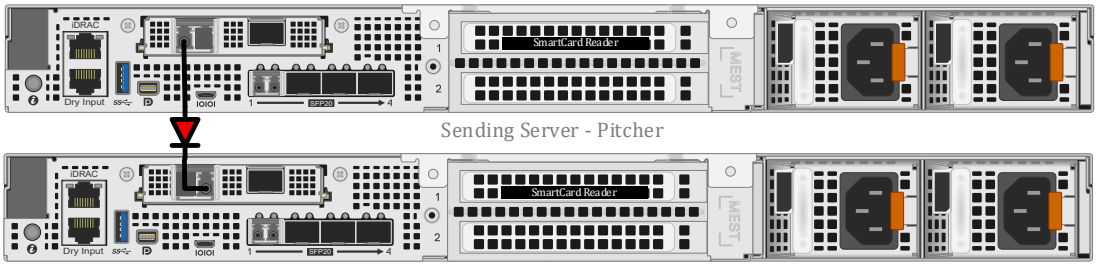
Unilateral data transfer between networks without the risk of unauthorized remote access.

The Arbit Data Diode, a Common Criteria EAL7+ certified solution, physically separates high security networks from lower classified networks, allowing one-way data transfer without compromising the confidentiality and integrity of the highly classified network.

Government and Public sectors along with Military and Defence agencies deal with critical and highly sensitive information. The Arbit Data Diode provides 100% guarantee that no data flows in the wrong direction providing network protection and allowing highly classified networks to import data while guarding against cyber attacks, espionage, hackers and data theft.

Software vs. Hardware Solutions

	Firewall	SW Data Diode	ARBIT Data Diode
100% protection against data theft	No	No	Yes
100% protection against hackers	No	No	Yes
Secure one-way connection	No	No	Yes
Protected by laws of physics	No	No	Yes



Sending Server - Pitcher

Receiving Server - Catcher

The Arbit Data Diode consists of a Sending Server, called a Pitcher equipped with an Arbit SimLink SFP+ module that transmits data to a Receiving Server called a Catcher equipped with the EAL7+ certified Arbit Data Diode 10GbE unidirectional SFP+ module.

Contrary to software solutions that ensure only the logical separation of networks, optical data diodes enforce physical separation of networks without any return channel. The Arbit Data Diode having the highest evaluation and certification in the world (EAL7+), fulfills advanced needs for stability, scalability, throughput and low latency, together with a competitive total cost of ownership. The best official client case is 24 files per. sec. nonstop for 14 days without any data loss.

File Based Throughput	7 Gbps
UDP Throughput	9,8 Gbps
Transactions per second	18 (52KB files)
Transaction failure rate	0 (out of 5M files)

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arbit

Arbit Data Diode Fact Sheet

BENEFITS

- 100% secure hardware data diode
- Full galvanic separation
- High throughput and transfer rate
- High stability and low TCO and maintenance
- 20+ years proven track record
- User-friendly web interface
- Powerful add-ons to control content moving through the data diode
- Full integration with OPSWAT advanced anti-malware platform
- Easy and secure configuration management
- Combine with TEMPEST level A
- Mix Tempest level A protection with EAL7+ cyber security in one device to protect and manage CLASSIFIED DATA
- Smartcard configuration management for added integrity and hardening.

FEATURES

- 10 GbE (Common Criteria EAL7+ certified)
- Accredited NATO COSMIC TOP SECRET and EU TOP SECRET
- No maximum file size (only limited by disk space on proxy servers)
- 64 data channels per diode
- Data channel priority (on transaction basis)
- Supports up to 24 streaming channels (logging, video, radio via UDP)
- High availability with peer-to-peer recovery
- Syslog and notifications by email
- Software runs on hardened Linux

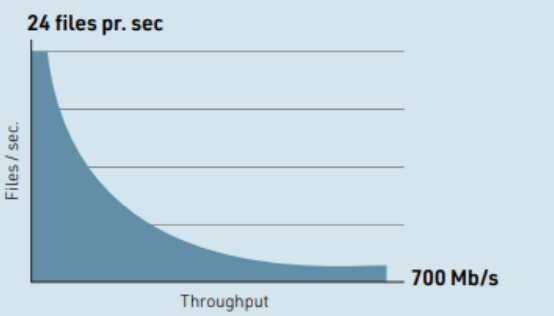
SUPPORTED PROTOCOLS

- Mail (SMTP)
- Simple File Transfer (FTP, SFTP)
- Windows share forwarding (SMB)
- Windows share mirroring (SMB)
- Network File System share
- forwarding (NFS)
- Network File System share
- mirroring (NFS)
- Time synchronization (NTP)
- Streaming UDP, TCP via UDP
- REST API Forwarder (HTTP, HTTPS)
- OPSWAT Integrations

KEEP YOUR SYSTEMS SECURELY UPDATED

- WSUS
- Linux repository
- Anti-Virus updates

RELATION BETWEEN FILE SIZE AND BANDWIDTH



HW Specifications	Value	
Configuration Type	Arbit Data Diode Standalone	Arbit Data Diode with Proxy server
Supported server	Dell PowerEdge R360	Dell PowerEdge XR5610
Memory and Storage	32 GB RAM / 8 x 480GB SSD (3.84 TB)	32 GB RAM / 16 GB Read Only SSD
Diode principle	Hardware based (optical)	
Backflow	None (secured by the laws of physics)	
Certification	Common Criteria EAL 7+	
Fiber technology	Single mode 1310 nm	
Diode NIC speed	10 Gigabit	
Server Size	1x 1U, 19” (two units required for a complete diode: 1 pitcher and 1 catcher)	
Server Weight	Max. 11 kg	
Power supply	2 x 100-240 VAC 50/60 Hz (Hot swap redundant)	
Dimensions (W x H x D)	19” x 1U x 463 mm	

Arbit reference customers

The Agency for Governmental IT Services | Danish Ministry of Defence Acquisition and Logistics Organisation | TERMA | Kongsberg

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