





# Fast, hardware-based network security

**arbit**  
Cross  
Domain  
Solutions

## DATA DIODE

Unilateral data transfer between high security networks without the risk of unauthorized remote access or data stealing

-  Listed on NATO IAPC
-  Certified Common Criteria EAL 5+
-  1 GbE
-  Fiber Optic Connection

Even the most secure connections can be compromised, and even the most well-protected networks can be penetrated.

The fail-safe solution is to physically separate high security networks from low security networks. While this is the most secure solution, this also severely hampers productivity since it prevents data from being transferred between the networks.

However, with the Arbit Data Diode you can allow one-way data transfer without compromising the integrity of the air-gapped network. By using a single fiber-optic connection which can only send light in one direction, the Arbit Data Diode transports data from less-secure networks, such as the open Internet, to secure networks.

While data is allowed to pass one way, it can never be transmitted the opposite way. This means that no intruders can use the connection to remotely access or steal data from your critical network.



## COMPARE SOFTWARE VS. HARDWARE SOLUTION

	Firewall	Software 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



TEST	GIGABIT (SSD)
Through-put	700 mbit/s
Transactions per second	18,0 (512 KB files)
Transaction failure rate	0 (out of 5 mio. files)

## TECHNICAL DESCRIPTION



The Arbit Data Diode is a physical data diode that establishes a physically secure one-way connection with a single fiber-optic cable. The transmission is handled by two dedicated servers.

The sending server is called a pitcher, and the receiving server is called a catcher. No data can be transported from the receiving network to the transmitting network. Therefore, the Arbit Data Diode is just as safe as manual data transfer, yet offers the same convenience as a normal network connection.

The Arbit Data Diode has received the Common Criteria EAL 5+ certification, is listed on NATO IAPC, and meets the ISO-15408 requirements.

## BENEFITS



- The Arbit Data Diode is a 100% secure physical data diode
- Proven stability through 10 years of service
- User-friendly web interface
- Integrates with Microsoft server solutions
- Quick installation and configuration
- Powerful add-ons to control content moving through the diode
- Full integration with OPSWAT multi anti-malware-scanning including content disarmament and data loss prevention
- 700 mbit/s through-put

## FEATURES



- Maximum file size limited only by available disk space
- 64 data channels per diode
- Data channel priority (on transaction basis)
- Supports up to 24 streaming channels (video, radio, etc.)
- Back Pressure in case of critical disk space
- Notifications by email, syslog, and SNMP
- User-friendly web-interface
- No daily maintenance
- 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 (TCP, UDP)
- REST API Forwarder (HTTP, HTTPS)

## REFERENCE CUSTOMERS

Arbit Data Diode and Arbit TRUST Gateway

KONGSBERG Norway [www.kongsberg.com](http://www.kongsberg.com)

Arbit RUGGEDIZED C41STAR Gateway

The Agency for Governmental IT Services [www.statens-it.dk/english](http://www.statens-it.dk/english)

Danish Ministry of Defence Acquisition and Logistics Organisation [www.fmi.dk/eng](http://www.fmi.dk/eng)

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