

Tested to operate in the battlefield

arbit
Cross
Domain
Solutions

RUGGEDIZED DATA DIODE

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

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.

- Common Criteria EAL7+ Certified Hardware
- Accredited NATO COSMIC TOP SECRET and EU TOP SECRET
- 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 and CDR
- 700 mbit/s through-put



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)

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

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 7+ certification, accredited NATO COSMIC TOP SECRET and EU TOP SECRET, listed on NATO IAPC, and meets the ISO-15408

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



SIZE

- Based on 1U, 19"/2 components
- Data diode 1U 2x19"/2 units



WORKING CLIMATE / TESTED ENVIRONMENTS

- Temperature shock
- Salt/fog
- Vibration
- EMC/EMI Environment



POWER

- Data Diode will run on 12-24 V
- Diode < 170 W



SECURITY CERTIFICATION

The Target of Evaluation (TOE) ensures NO backflow is possible.

Accredited NATO COSMIC TOP SECRET and EU TOP SECRET by CFCS, DK.

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)

ABOUT

Founded in 2006, Arbit specializes in cybersecurity solutions for organizations requiring the highest security. Arbit's solutions are deployed in top security networks throughout the world, including military organizations, police, and intelligence services.

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