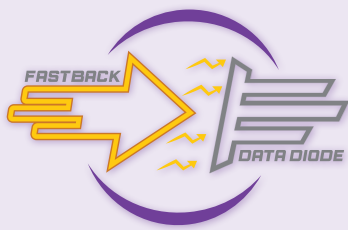


# Fastback Data Diode Specifications



## The Importance of Secure One-Way Data Flows

Mission success in the defense, intelligence, and other critical organizations relies on the secure, successful transfer of data streams and files across network resources of different threat environments. This requires a secure, one-way data flow between networks that is physically separated and cannot be compromised.

## The Role of Data Diodes

A data diode is a hardware device that creates an absolute physical protocol break between networks that can not be compromised using electronic or software tools. The Fastback Data Diode is installed on network servers in front of dedicated guards that provide inspection of incoming files on data moving to and from isolated networks. This allows users to quickly and easily add data diode protection into their cross domain solution without complex integration challenges.

## RTB Requirements

To help secure Cross Domain Systems (CDS), NCDSMO has created a set of requirements called Raise the Bar (RTB). RTB Guidelines specify the measures that government organizations in the defense, intelligence, and other sensitive missions must comply with to ensure secure one-way transfer between networks. NSA assesses diodes to meet RTB standards and provides a list of diodes that meet RTB criteria on the NCDSMO website.

# The Fastback Data Diode Kit

## A Complete, Lightweight, and Guard-Agnostic One-Way Transfer Solution



Fastback is an affordable, scalable solution leveraging commodity servers and hardware without the expense of replacing your existing components or worrying about proprietary compatibility. Fastback meets NSA's RTB standards for Data Diodes and allows you to meet security requirements quickly and confidently without excessive support or integration costs.



### Lightning Fast

The Fastback Kit is a complete, lightweight solution that uses commodity hardware to move data at speeds greater than 9Gbp/s in a uni-directional flow.



### Convenient Compliance

Fastback has been evaluated by the National Security Agency (NSA) and is included on the NCDSMO's Official Data Diode list.



### Easy Integration

Fastback uses commodity hardware and drivers to allow fast, reliable setup using existing hardware, and can interface with commercial RTB-compliant cross domain guards.



### Defense-In-Depth Architecture

Fastback's data diode kit provides physical Denial of Connectivity into protected networks and features polling and request-driven interfaces.



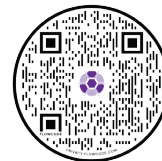
### Fastback Kit Includes:

- 10G Network Interface Cards (2)
- SFP+ Adapters (2)
- Fiber Optic Coupler
- Software Installation Discs
- Installation and Administration Manual



**Probity**  
Cross Domain Solutions

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**Cleared Cross Domain Services**  
Assessment • Integration • Orchestration

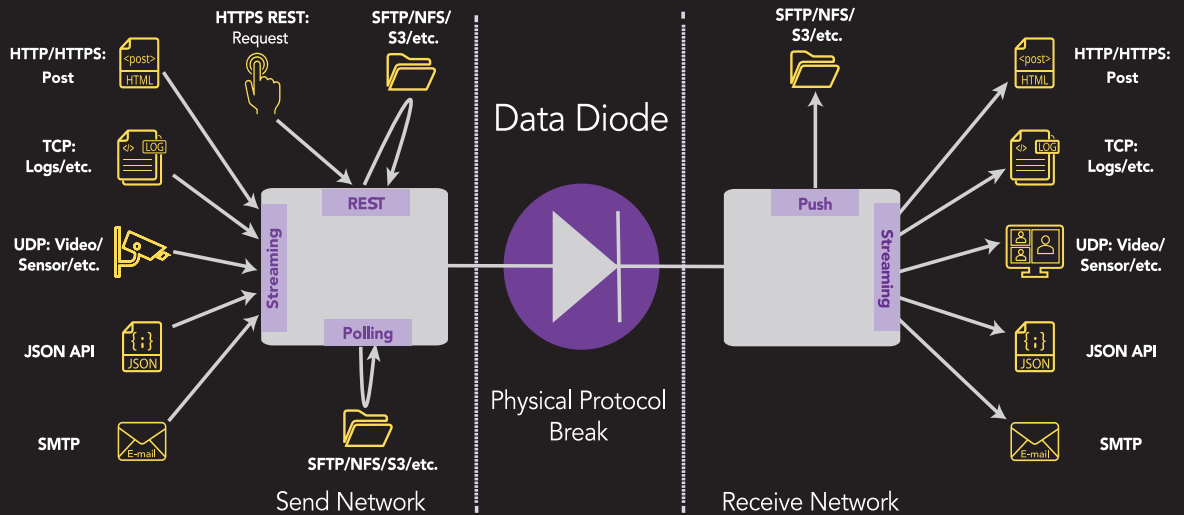
**FASTBACK**  
NCDSMO Listed Data Diode Kit

# Fastback Data Diode Specifications

## Connectors:

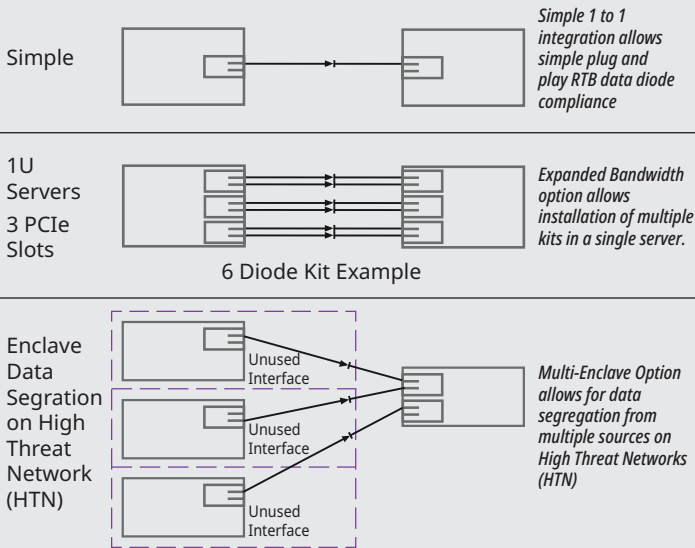
Fastback has several types of dataflow connectors including:

Local file system (NFS, SMB, SCP, etc.), S3, GCP buckets using the S3 API, SFTP, FTP and FTPS, HTTP and HTTPS Post, SMTP (e-mail), Fastback Streaming API(JSON), UDP Streaming (video, syslog, etc), and TCP Streaming.



## Resource Options

Fastback can be configured to provide data diode protection in a wide range of network environments. Our kit approach allows users to install multiple diodes in a single set of machines to handle a scalable capacity of data from independent network connections in a space saving, cost-effective manner that meets RTB requirements.



## Cleared Cross Domain Services Assessment • Integration • Orchestration

Probity's expert Cross Domain Solutions team is available to help with CDS Assessment, custom integration, inspection, and workflow orchestration support to create a complete, concise, and compliant system for any mission requirement.

Our cleared resources have experience in every variation of infrastructure, including cloud, hardware, and hybrid environments. Probity's deep knowledge of commercial guards and GOTS systems provide a true one-stop support team for the most challenging applications.

### MINIMUM SYSTEM REQUIREMENTS

The sending and receiving computers can be of any form factor (laptop/tower/server), with the following minimum requirements:

- One empty PCIe slot (full or half height)
- 3GHz, 4 core processor
- 256G Storage
- DVD Drive
- 16G RAM

### OS REQUIREMENTS

Fastback can be installed using several different Linux distributions, including RHEL, CentOS, Rocky 8 and Rocky 9. Users can choose to start with a fresh OS or a customer-installed OS to maintain current accreditation. A Rocky 8 ISO is included with the kit.

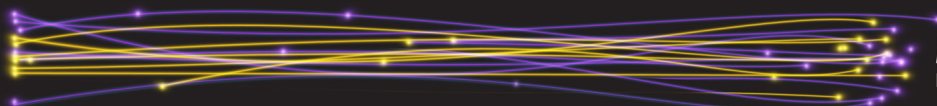
### PERFORMANCE

Throughput/Speed: 9Gbp/s per Interface  
Sustained Performance with Large or Small Block I/O  
Multiple Data Flow Capability  
MD5 and CRC32 Validation of Data Transfer

For Quotes and Procurement Options email [fastbacksales@probity.com](mailto:fastbacksales@probity.com)

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**FASTBACK**  
NCDSMO Listed Data Diode Kit