



QORBIT

High-Assurance Data Diode Platform



QORBIT Secure your critical network perimeter with high-performance data diode solution, engineered to deliver absolute hardware-enforced isolation. By leveraging a physically unidirectional architecture, the platform completely eliminates the possibility of reverse communication, permanently shielding your sensitive assets from external cyber threats. Operating at a sustained wire-speed throughput of 1 Gbps, it ensures seamless, real-time data streaming and rapid file transfers without compromising on security or network performance.

CORE FEATURES

True Hardware-Enforced One-Way Communication



01

Physically isolates networks with strict one-way data flow, making inbound cyber threats impossible

Complete Air-Gap Protection



02

Safely transfer critical operational data without exposing sensitive networks to external cyber threats

Throughput



03

1 Gbps supporting real-time data streaming without latency bottlenecks

Zero Attack Surface Return Path



04

No software configuration or firmware modification can create a reverse communication channel

Military-Grade Security Architecture



05

Designed for deployment in defense, critical infrastructure, government, and classified environments.

High-Speed Data Transfer



06

Supports reliable transfer of operational, telemetry, monitoring, and event data with minimal latency

Tamper-Evident Design



07

Engineered with hardware protections against unauthorized modification and physical attacks

Real-Time Monitoring



08

Provides visibility into transfer status, throughput, system health, and security events

Low Maintenance Architecture



09

Eliminates the hassle of signature updates, antivirus definitions, and complex security rule management

Network Segmentation Enforcement



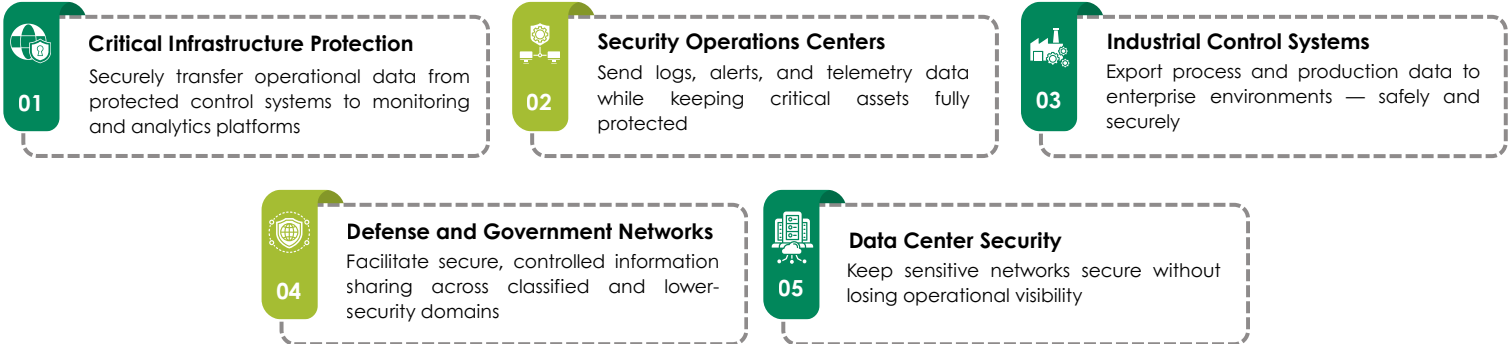
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Creates secure boundaries between trusted and untrusted environments

MOVE YOUR DATA & STOP THE THREATS



IDEAL APPLICATIONS



TECHNICAL SPECIFICATION

Parameter	Specification
Device Type	Hardware-enforced Unidirectional Network Data Diode
Data Direction	One-way only: Source/Untrusted → Destination/Trusted
Network Speed	1 Gbps
Interface Type	4 × 1GbE RJ45
Throughput	≥ 950 Mbps sustained unidirectional throughput
Duplex	Full duplex physical interfaces, with data forwarding restricted to one direction
Protocol Support	IPv4, SFTP
OSI Enforcement	Layer-3
Reverse Channel	No physical return data path
MAC Learning	Optional, depending on architecture
VLAN	IEEE 802.1Q VLAN support
MTU	1500 bytes minimum; preferably configurable up to 9000 bytes

Parameter	Specification
Flow Control	Default - strict unidirectional operation
Management Interface	Dedicated management Ethernet interface
Management Protocols	HTTPS
Users	Multi User support
Logging	local event logging & file transfer logs
Security	Secure Boot, signed firmware, hardened customized embedded OS
Configuration	Web GUI based
Administration	Separate management plane from data plane
Form Factor	1U rack-mount
Operating Temperature	Approx. 0°C to +40°C
Reliability	Enterprise-grade components
Fail-Safe Behaviour	On power/system failure, data flow stops



Stay Connected

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