

Next Generation Data Diode™



Feature Summary

• MULTIPLE FORM FACTORS

The Next Gen Data Diode™ offers the right size for the job:

- Key fob size for embedded or compact application
- 7.5 X 4.25 X 1.125" for desktop or machine mountable application
- 1U for rack mount

• MULTI PROTOCOL

- Supports UDP
- Others Available

• PAYLOAD LEVEL INSPECTION

- Assures only validated messages
- Non-validated messages dropped or passed for forensic analysis

• TRAFFIC ENCRYPTION

- Supports AES 256
- Others Available

• TRAFFIC ENCAPSULATION

- Supports IPSec ESP protocol

• THROUGHPUT

- 1 Gbps Ethernet
- 50 Microsecond Latency

• ADDITIONAL SPECIFICATIONS

- WAN: Ethernet (10/100/1000)
- LAN: Ethernet (10/100/1000)
- CANBus/J1939/MIL-STD-1553
- Power: 12vdc/3A
- IP:IPv4/IPv6

PRIORITIZE AND PROTECT YOUR MOST IMPORTANT ASSETS

In an era when zero-trust levels of cybersecurity are becoming an absolute necessity to protect vital corporate information and systems, many companies are struggling to stay one step ahead of well-organized and funded cyber assailants intent on disrupting their business operations, stealing their intellectual property, or holding them for ransom. Conventional means of protection such as firewalls and intrusion detection systems are not robust enough by themselves, as witnessed by the ever increasing levels of highly visible attacks.

Affirmed Cyber Incorporated offers a patented "Next Generation Data Diode™" that affords companies an additional layer of protection for vital corporate assets and systems. It safeguards these environments using a hardware device known as a "Field Programmable Gate Array" or FPGA to assure that the only data being allowed into or out of a protected device has been validated to make sure that messages are of the type

and the format that should be present in that environment. Data which does not meet these criteria (such as malware) are either dropped or passed through an "out of band" channel to a log repository or a SIEM of the customer's choosing. This means that even in the event that a cyber assailant gets through a firewall, around an intrusion detection system, and gets missed by an anti-virus program (which is virtually guaranteed to happen if the malware is a "zero-day" event), your system or asset will be safeguarded at a byte level by the Next Generation Data Diode™. Since the device is an all hardware device, it contains no operating system or software code that can be compromised by an attacker from across the city or across the world. Diodes have been used for years in critical infrastructure environments, so they have an established role. What makes this device different is its ability to allow validated traffic to pass through in the "opposite" direction, providing an unprecedented level of protection.