Experts tell us that over 95% of firewall breaches are due to misconfigurations, but how is a company supposed to avoid misconfigurations when its applications are constantly changing, AND it can't find the talent that it needs to be able to configure its firewalls.

There are at least HUNDREDS if not THOUSANDS of tunable parameters to today's next generation firewalls. Perhaps someday, artificial intelligence will be able to play a bigger role in managing these domains, but do you want to roll the dice with access to your critical systems on the line?

Affirmed Cyber employs a novel approach as an alternative to firewalls for mission critical systems or devices. Our devices are configurable, and go from "out of the box" simplicity to highly tailorable (down to the byte level) for devices that simply can not afford to be compromised.

The attached chart shows some of what can be done with the Affirmed Cyber Next Generation Data Diode… when you just don't have the manpower on staff to provision and configure every critical device with its own firewall.

Affirmed Cyber Inc.

The Next Gen Data Diode™ versus Next Generation Firewalls

Category	Next Generation Data Diode™	Next Generation Firewalls
Deep Packet Inspection	✓	✓
Time to Deploy	The Affirmed Cyber NGDD™ is "plug and play" with either Ethernet/Ethernet or Ethernet/CANBus.	These are typically systems that are powerful and provide network device filtering functions, but are time consuming to deploy and may involve the time and expense associated with security outsourcing or consulting services
Level of Expertise Required to Configure and Manage	1. Open Box 2. Insert Network Cables 3. Turn on power	Next Generation Firewalls take considerable time to configure; run complex software systems bundled with hardware and require ongoing administration and configuration. AND the resources to perform these tasks
Security Risk of Misconfiguration	N/A	According to Gartner Group*, 95% of firewall failures are caused by misconfiguration, not flaws. It takes experts to configure devices and update firmware; it is very difficult to hire and retain qualified personnel.
Impact on Network Performance	Designed to protect an organizations most critical assets, throughput ranges between 1Gbps - 5 Gbps per device, with maximum latency of 50 micro-seconds	Varies according to manufacturer and scope of coverage of devices/environments; but large deployments tend to require significant network resources
AES 256 Bit Encryption	✓	?
IPSec Encapsulation	✓	?
Embeddable Form Factor	The compact version of the NGDD weighs less than 1 ounce, and if configured in DC mode can run for over 6 months on 4 AA batteries	Generally, these systems are not designed to serve embedded purposes and are either desktop or rack mounted for data center usage

*https://www.zenarmor.com/docs/network-security-tutorials/most-common-cause-of-firewall-failure