



The Next Generation Data Diode™

Not all diodes are created equal...

		Next Generation	Optical
	Protocol and Capability	Data Diode™	Data Diode
1	Using UDP - only permits traffic in one direction	✓	✓
2	Using UDP - Software encrypted traffic in one direction	✓	✓
3	Using UDP - AES hardware encrypted traffic in one direction	✓	Varies
4	Using UDP - with either software or AES hardware encryption, and guaranteed delivery of UDP payload using patented Turnstile ¹ approach	✓	X
5	Using TCP/IP -with either software or AES hardware encryption, permitting only valid ACK's or NAC's in reverse direction across diode to enable TCP/IP	✓	X
6	Using either TCP/IP or UDP - bi-directional AES hardware payload encryption	✓	X
7	Using either TCP/IP or UDP - bi-directional AES hardware payload encryption, with IPSec encapsulation (so both headers and payloads are encrypted)	✓	X
8	Any of the aforementioned capabilities, but also does header checking including MAC and IP addresses, port numbers, and message lengths. Provides "firewall like" functionality without need to manage them	✓	Varies
9	Any of the aforementioned capabilities, but also does payload checking (requires professional services to customize the device to customers specific traffic content)	✓	X
10	Any of the aforementioned capabilities, with remote management via an out-of-band channel (for DD1000 and TSNIC models only)	✓	X