Defend networks from hackers and Internet based attacks with the WebSensing **Data Diode.**

A Diode is a network device that permits network traffic to flow in only *one* direction across it. Any device connected to a Diode will be able to either send network traffic or receive it, but not both.

A Diode allows businesses to connect sensitive corporate assets to the Cloud for analysis, without permitting any traffic -- or embedded attacks -- to reach back to the asset from the Internet.

Many critical corporate assets have a need to report data back to headquarters, but also need to be completely sheltered from Internet threats. A Diode is ideal for delivering on this requirement.

When used in reverse, a diode permits sensor feeds to be transmitted into air-gapped or isolated networks, while guaranteeing that no data can escape that network.

Data Diodes are already deployed in many high-value environments, such as nuclear power plants and sensitive government installations. The Web Sensing Data Diode delivers the same function but at a much lower price point, making this important security capability within the reach of both large and small enterprises.

Unlike firewalls, which are easily misconfigured, Diodes are plug-and-play simple. Data flows in the direction of the arrow on the Diode, and not the other way. This makes cybersecurity auditing much easier and allows personnel without IT training to properly install and maintain Diodes.

Web Sensing Diodes are *all-hardware* devices, containing no vulnerable operating systems or other software. This renders them impervious to software attacks embedded in network traffic. They are small enough to deploy with IoT devices and, unlike previous Data Diode technology are priced to make using them in IoT applications a reasonable proposition.

Form Factor	Desktop or 1U Rack-mount
WAN	Ethernet (10/100/1000)
LAN	Ethernet (10/100/1000)
Max Throughput	1Gbps Ethernet
Max Latency	50 micro-seconds
IP	IPv4/IPv6
Protocol	UDP, others available
Custom Traffic Inspection	available
Traffic Encryption	AES[1] available
Max Concurrent Sessions	limited by throughput
Logic	Web Sensing Hardware Diode[2]
SNMP[3] Monitoring	available
Power supply	12vdc/3A
Management & Authentication	not required
Desktop Dimensions	7.5" (w) x 4.25" (d) x 1.125" (h)

[1] Advanced Encryption Standard
[2] US. Patents: 10,148,761 (Dec 4, 2018) and 10,389,817 (Aug 20, 2019).
[3] Simple Network Management Protocol