Virtual Integrated Network (VIN) Adaptor

Enhance protection for desktops, laptops, servers and IoT devices with WebSensing's **Virtual Isolated Network (VIN) Adaptor.**

As its name suggests, a VIN is a new type of network overlay. It allows any group of computers and devices to inter-operate while being completely isolated from the rest of the Internet.

Once connected to a VIN, a computer or device can only communicate with other computers or devices within the same VIN – this effectively creates a "virtual air-gap" around the VIN, precluding malicious intrusions.

Computers or devices can be anywhere in the world, connected to any network, so long as there is a wired Ethernet connection into the Internet.

A VIN is easy to build: Every computer or device in the VIN just plugs into the Internet via a Web Sensing VIN Adapter. The set of adapters are preconfigured to construct the VIN and isolate it from the Internet.

Since no communication from the VIN to other hosts on the Internet is possible, a VIN is an appropriate location to house valuable data that must be shared within it: intellectual property, industrial manufacturing data, or private personal information.

Web Sensing VIN Adapters are all-hardware devices, containing no vulnerable operating systems or other software. This renders them impervious to software attacks embedded in network traffic.

Form Factor	Desktop or 1U rack-mount
WAN/LAN	Ethernet (10/100/1000)
Protocols	TCP/IP protocol suite
Encapsulation Protocol	IPSec ESP[1]
Encryption Algorithm	AES[2]
Custom Filtering & Validation	available
Max Throughput / Latency	1Gbps / 50 micro-seconds
Max Concurrent Sessions	limited by throughput
Logic	Web Sensing Packet Inspection and AES engines[3]
SNMP[4] Monitoring	available
Power supply	12vdc/3A
Configuration	Dedicated back-channel
Desktop Dimensions	7.5" (w) x 4 1/4" (d) x 1 1/8" (h)

[1] Encapsulating Security Payload
[2] Advanced Encryption Standard
[3] US. Patents: 10,148,761 (Dec 4 2018) and 10,616,344 (Apr 7 2020).
[4] Simple Network Management Protocol