

Product Overview



SifoWorks is a multi-function security gateway system that is based on O2Micro's powerful ASIC design. Apart from its firewall capabilities, SifoWorks is also equipped with several industry-leading security features such as: activating NAT and policy routing concurrently while maintaining line speed processing capability; effective log system; powerful network security mechanism, protection against ARP attacks, content filtering, IDP, DoS/DDoS protection, P2P/IM control, etc..



SifoWorks also provides an IPSec VPN function, allowing companies to set up point to point remote connections whenever necessary. This allows mobile employees or branch offices secured access to important backend resources.

The SifoWorks system can be managed via multiple methods including Web and SNMP. It's multi-lingual and user-friendly administrative interface greatly reduces the system's learning curve and administrators' workload. Effective real time monitoring capabilities allow administrators to ensure that the network is operating normally all day.

Product Features

- ASIC-based Firewall / VPN.
- Line-speed processing for any packet size.
- Deep packet inspection mechanism at the application layer.
- Provides URL, Email and application layer content filtering functions.
- Fine granularity QoS control at 1Kbps for different applications.
- Provides a convenient and effective real-time interface for management and monitoring.
- Low latency (<10 ms).
- Gigabit line-speed firewall performance.
- Sensitive keyword (Sensi-Word) function.
- Guarantees the best level of service for telecommunication or companies of similar scale.

SifoWorks E-Series Models

	E400	E600	E800
			
Firewall Performance	500 Mbps	1.2 Gbps	3 Gbps
VPN Performance	200 Mbps	200 Mbps	200 Mbps
No. of Concurrent Sessions	1, 500, 000	2, 000, 000	3, 000, 000
New Sessions Per Second	15, 000	18, 000	25, 000
No. of Security Policies	20, 000	20, 000	20, 000
No. of Interfaces	8×FE, 2×MGT	4×FE+4×GE, 2×MGT	8×GE, 2×MGT
Max. no. of Customized Security Zones	7 Security Zones	7 Security Zones	7 Security Zones
Packet Latency	5µs - 13µs	5µs - 13µs	5µs - 13µs
User Scale	Small, Medium Enterprises	Medium, Large Enterprises	Large Enterprises
No. of Concurrent VPN Tunnels	1, 000	1, 000	1, 000
Certifications	Please visit http://www.o2security.com/product/certifications/ for the complete list of certifications and awards.		

Features

Mode of Operation	
Layer 2	Transparent
Layer 3	Route, NAT
Mix Mode	Yes
NAT (Network Address Translation)	Static, Dynamic
PAT (Port Address Translation)	Yes
Application Proxy	Kernel-based Content Filtering
802.1Q VLAN	128
VLAN Routing	Yes
Users per Interface	Unlimited
DHCP	Support Server and Relay Method
Firewall	
IP-MAC Binding	Yes
Predefined Service and Network Objects	Yes
Local Access Control	Rule-based
User-based Access Control	Yes
QoS	
Maximum Bandwidth	Yes
Guaranteed Bandwidth	Yes
Traffic Shaping	Yes
DiffServ	Yes
QoS Granularity	1Kbps
No. of Interface Array	4 per QoS Zone
No. of QoS Zone	3
Content Filter	
Protocol Anomaly Detection	Yes
Keyword Filtering	For connections using any protocols
HTTP Filtering	URL and White-list, Command, Keyword, Prohibit multi-thread downloading
HTTP Clearance	Active X, Java Script, Java Applet, Cookie
Email	SMTP server, Recipient and Sender White-list, Email subject, Email keyword, Email attachment file name, Email size, Maximum number of recipient
FTP	File name, Data connection keyword, Command Prohibit multi-thread downloading
P2P Application Control	Bit Torrent / E-donkey / MUTE
IM Application Control	MSN / QQ / AIM / Yahoo Messenger
Dynamic Protocol Detection	RTSP / H.323 / FTP / PPTP
Intelligent Protocol Recognition	VoIP: H323 / RTSP / SIP FTP / HTTP / IMAP / POP3 / SMTP / SSH / VNC / TFTP / Telnet
IDP	
Operation Mode	Sniffer, In-line
IDS Common Rule Database	7000 Rules, 50 Groups
Customizable IDS Rule	Yes
IDS Rule Database	User Upgradeable
Pre-processors	IP reassembly, TCP reassembly, Port Scan
DOS/DDOS Protection	
Operation Mode	Monitor, In-line
Categorization Method	Source IP, Destination IP
Protocols included in Statistics	TCP, UDP, ICMP, other IP protocols
Statistics Generated By	New connections, total connections, message rate
SYN Proxy	Supports verification of TCP traffic
Attack Detection and Protection	Tear Drop, Smurf, Land Attack, ARP Spoof etc.
VPN	
VPN Hardware Acceleration Card	Yes
Encryption Algorithm	DES, 3DES, AES
Authentication Algorithm	MD5, SHA-1

Perfect Forward Secrecy	D-H Group1, 2, 5
IPSec Protocol	ESP, AH, ESP+AH
Manual Key, IKE	Yes
Peer Authentication	Pre-shared Key
L2TP Over IPSec	Yes
IPSec-NAT Traversal	Yes
Star topology VPN (Hub-and-Spoke VPN)	Yes
Connection Timeout	Based on Data or Time Duration
Administration	
Local Administrator Database	Yes
External Administrator Database	Radius, LDAP, AD
Restrictive Network Administration	Yes
Multiple Administrator Authority Levels	Root, Administrator, Read-only User
Software Upgrade	WebUI
User Authentication	
User Authentication	Supports up to 500 users
Local Authentication Server	Yes
Third-party Authentication Servers	Radius, LDAP, AD
Web-based Authentication	Yes
Lock Users	Yes
Authentication Methods	Pre-authentication and real-time authentication
System Management	
SSL-based WebUI	Yes
SSH-based Command Line	Yes
Simple Configuration Wizard	Yes
Standard and Customizable MIB	Yes
SNMP	v1, v2c, v3
Central Management	SifoView™
Logging and Monitoring	
Internal Log Database	Yes
Syslog	Yes
Remote Syslog Server	Yes, (Maximum 4)
Local Status Display	LCD
Print Log / Debug Information to Terminal	Yes
Alert Method	Email Alert
Routing	
Route Redundancy	Yes
Route Reflection	Yes
Route Detection	Yes
Route Preservation	Yes
High Availability	
Active - Passive	Yes
Active - Active	Yes
Swap Condition	Device failure, Interface failure, Link failure
Synchronization of Configuration File or Configuration Modification	Yes
HA Device Authentication, HA Data Encryption	Yes
Speed of Status Swapping	3 seconds
Security Standard Certification	
ICSA Firewall, ICSA IPSec GB/T 18019, GB/T 18020	Yes
Physical Working Environment	
Operational Temperature	0°C – 40°C
Non-operational Temperature	-10°C – 70°C
Humidity	10% – 90%
Product Dimensions and Power Supply	
Dimension (Length × Breadth × Height)	428 × 358 × 44 mm
Weight	6 kg
Power Supply	90 V – 260 V; 50 Hz – 60 Hz
MTBF	100,000 Hours



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