QVF Series

VPN Security Routers



As Uno, You got all I







SSL VPN

As the Internet access is wide available these days, more and more mobile workers need a fast and easy way to get data from office while they are on the road and may not be able to use their own computers. Qno's powerful SSL VPN is developed to provide application level security access for remote users using any PC with browser.

The SSL VPN allows network administrators to set strict rules of available applications for each SSL tunnel user. It divides the supported applications as Network Service, Terminal Service, My Desktop, My Network Place, and Virtual Passage. All these applications can be easily configured in one setting page to be ready to access. This can quickly change the C/S applications into B/S topology or remote control, as well as add on the protection to data transmission.

Qno's SSL VPN has the most simple and straightforward graphic interface and it does not require too much technical guidance before a user start to use the system. This can extremely eliminate the burden of network administrators and speed up total implement of SSL by corporations. Besides, Qno SSL VPN implements the group management concept and simplifies the SSL tunnel rule setting in one configuration page within the straightforward setup procedures. The network administrator can quickly apply the default user groups to configuration templates to saving the detail configuration steps.

Virtual Keyboard

The on-screen keyboard on login page allows remote users to type password without using physical keyboard. As remote users are possible to login SSL with any PC in anywhere, this virtual keyboard can avoid hackers using spyware to capture the keyboard actions and steal the password.



Graphic User Portal

Inheriting the easy-to-use factors in all Qno products, these SSL VPN routers display the user portal with graphic interface to represent each application. Users can simply click the icon on portal to start their works without any hassle.



VPN (Virtual Private Network)

The QVF products are the excellent and cost saving appliances developed for franchise organizations, chain stores, and enterprises with distributed branch offices. Qno VPN routers support multiple VPN protocols such as standard IPSec VPN, PPTP, SSL, and Qno exclusive QVM VPN technology. These highly integrated devices give SMB the flexibility to build up not only the site-to-site VPN tunnels but also single-to-site security access for remote user. Beside the VPN, these equipments contain all the functions of broadband sharing and traffic management and make them the real all-in-one devices to save cost and ease the complexity of management.

IPSec VPN

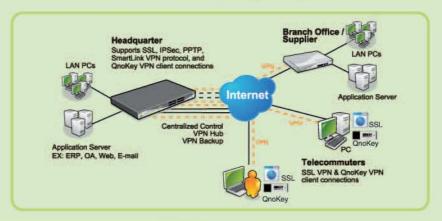
All of the QVF routers support standard IPSec VPN to interoperate with any IPSec VPN device to establish IP security transmission.

Exclusive QVM VPN

Unlike the IPSec VPN required 20 more steps to establish a single VPN tunnel, the Qno SmartLink VPN (QVM) simply requires user name, password, and server IP to complete the connection without compromising the strength of security. Beside, this distinctive function supports VPN failover that can automatically establish the VPN connection from another WAN port when the original WAN service is interrupted. This will ensure reliable operation of VPN connectivity. Moreover, this outstanding function also includes the centralized control feature to enable the administrator in headquarter to monitor all outgoing connections from the QVF management page. This allows IT managers to cut down on maintenance costs by remote login to offsite locations without the need for physical presence.

PPTP VPN

The inclusive PPTP VPN server facilitates dial-in VPN for remote users by taking advantage of Windows@ built-in PPTP client.



VPN Client QnoKey & QnoSoftKey

The exclusive QnoKey & QnoSoftKey VPN clients are the state-of-the-art VPN solution developed by Qno. They are designed for road warriors and remote site users who may not have technical knowledge to fast and conveniently build up secured network connection with headquarters or central offices. The Qnokey contains a physical USB device and a cohered software as QnoSoftKey is a utility only. The USB device is equipped with unbreakable encryption chip inside and easy to plug and play on Windows OS PC. With the Qnokey or QnoSoftKey, mobile users can easily establish IPSec VPN connection with Qno's QVF VPN router by simply input PIN code.

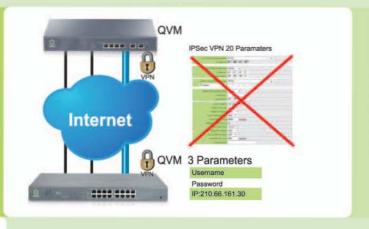
Beside the easy to use and configuration, QnoKey & QnoSoftKey have the full set of management functions. The network administrator can instantly check all the connections status of QnoKey users through the GUI of QVF VPN Router. To prevent the misuse of QnoKey, the network administrator not only can set the valid time of each QnoKey but also can take lost-protection actions once the users lost his/her QnoKey. The network administrator can cut the connection or erase the parameters inside QnoKey to prevent the malicious hackers to sneak into your private network.



Qno Exclusive Benifits

Quick VPN connection & fail over

QVM VPN only needs to input three parameters: IP address, user name, and password, to establish the IP VPN tunnel and remain the IPSec security. Furthermore, this exclusive feature provides the VPN fail over to keep the critical VPN tunnel always connected while saving a lot of configuration efforts.





Double your VPN bandwidth

Qno develops the outstanding VPN Load Balance for SMB customers who always struggle between the cost and bandwidth of single Internet line. Utilizing the Qno multi-WAN and VPN load balance technologies, it will not be costly to expand VPN bandwidth to maintain business information flow smoothly.

Control your VPN bandwidth usage

VPN QoS is another advanced VPN technology Qno develops to meet increasing demand of VPN transmission. Nowadays, more and more enterprises deploy VPN to transport data of ERP, Voice or Video conference, e-mail, and confidential documents. It is essential to avoid congestion by administering the VPN bandwidth for each application running in VPN tunnel.



Internet VPN ERP VOIP 20% 50% 30%

Check your SSL remote side security

Qno's SSL host check can scan the browser version, anti-virus status, firewall status, and certain applications on remote side PC before it actually starts the SSL transmission.

	2700 WWW.		22407270VA			
Model Name Hardware Spec	QVM250	QVF8034	QVF8042	QVF8072	QVF8205	CVF8210
Network Processor	Network Processor	Intel IXP425 266MHz RISC	Intel IXP425 533MHz RISC	Intel IXP425 533MHz RISC	Intel IXP425 533MHz RISC	MIPS64 1G Processing Sper
Flash	8MB(64Mbit)	8MB (64Mbit)	16MB (128Mbit)	16MB (128Mbit)	16MB (128Mbit)	32MB (256Mbit)
DRAM	32MB(256Mbit)	64MB (512Mbit)	64MB (512Mbit)	64MB (512Mbit)	128MB (1,024Mbit)	512MB (4,096Mbit)
Network Interface						
WAN Port	2	2	2	2-4	2~8	4 (Gigabit)
DMZ Port LAN Port	1 (WAN2/DMZ) 3	1 (WAN2/DMZ)	1 (WAN2/DMZ) 8	1 11~13	7~13	1 (Gigabit) 8 (Gigabit)
Performance	3		, , , , , , , , , , , , , , , , , , ,	117-13	7-19	o (digabit)
NAT Acceleration	-	•	•		•	Hardware Accelerate
Session	5,000	30,000	50,000	70,000	120,000	300,000
NAT Throughput	20-30Mbps	200Mbps	200Mbps	200Mbps	200Mbps	2Gbps
VPN Throughput	3DES/5Mbps	3DES/60Mbps	3DES/90Mbps	3DES/90Mbps	3DES/90Mbps	3DES/175Mbps
MultiWAN Traffic Control Line Backup	•		•	•	•	•
Network Detection	•				- :	
Session-based Load Balance	•	•			•	
IP-based Load Balance	Future	•		•	•	•
Strategic Routing	Future	•	•	•	•	•
Virtual Routing	17.0	•	•	•	Server Site	Server Site
WANConnection						
DHCP IP Assignment	•	- :	•	•	:	•
Fixed IP Assignment ADSL PPPoE	- :				-:-	
PPTP		- :			-	
Transparent Bridge	(4)	•	•	•	•	•
DHCP Server		2.2			-	327
The number of assignable IP	Class C	Class C	Class C		Class C (Multiple Class C in Future)	4 Class C
IP & MAC Binding	•	•	•	•	•	•
MAC Address Control	•	•	•//		•	•
QoS Smart QoS					Future	
Guarantee bandwidth	•	- :	•	:	Future	ě
Maximum bandwidth	•	•	•		•	•
Priority	•	•	•	•	•	•
IP Grouping		•	•	•	•	•
Session Control by IP	•	•	•	•	•	•
Firewall		Por co	Tenance.	**************************************	18120.0	PARTER
Bi-direction ARP Binding SPI/DoS Detect	•	Future	Future	Future	Future	Future
Attack Logging		•			- :	
Access Control	•	•		•	•	•
URL/Keyword Filter	•	•	•		•	
Block Java/Cookies/ActiveX/						
HTTP Proxy						1277
Block QQ MSN Skype	Block QQ	•	•/	•	•	Future
QQ Number Management IP Filter	- :	•	-	•	•	
Service Port Filter	•	•				
VPN						
VPN Tunnel	Max 10	Max 100	Max 200	Max 300	Max 600	Max 1000
Authentication	MD5/SHA1	MD5/SHA1	MD5/SHA1	MD5/SHA1	MD5/SHA1	MD5/SHA1
Encryption	DES/3DES/AES	DES/3DES/AES	DES/3DES/AES	DES/3DES/AES	DES/3DES/AES	DES/3DES/AES
IKE Key Management	•	•	•	•	•	•
VPN Passthrough VPN Backup	-:	- :		:	•	:
VPN Hub	X	•				
Group VPN	•	•	•		•	
NAT Traversal (NATT)	•	•	•	•	•	•
QVM SmartLink VPN Server	-	•	•	•	•	•
QVM SmartLink VPN Client	•	•	•	•	•	Future
QnoKey Server		N) (CO OII			May E00 Cleate
PPTP VPN Server NAT	Max 10 Clients	Max 40 Clients	Max 60 Clients	Max 80 Clients	Max 150 Clients	Max 500 Clients
One-to-One NAT	•	•	•	•	•	
PAT Address Translation	•	•	•		•	•
DMZ/Virtual Server	•	•	•	•	•	•
UPnP Support	•	•	•	•	•	Future
IP Routing		78		1/2	2	
Static Routing Dynamic Routing RIPI/II		•	•		•	•
				72		
DDNS	<u> </u>	•	•	•	•	
DDNS QnoDDNS		•	•	•	•	
	2	•		•		
QnoDDNS 3322/DynDNS Simultaneous Multiple	•	•	•	•	•	
QnoDDNS 3322/DynDNS Simultaneous Multiple DDNS Deployment	•	•	•	•	•	•
QnoDDNS 3322/DynDNS Simultaneous Multiple DDNS Deployment Port Management	•	•	•	•	•	
QnoDDNS 3322/DynDNS Simultaneous Multiple DDNS Deployment Port Management Configurable Port	•	•	•	÷	•	•
QnoDDNS 3322/DynDNS Simultaneous Multiple DDNS Deployment Port Management Configurable Port Status Display	•	•	•	•	•	
QnoDDNS 3322/DynDNS Simultaneous Multiple DDNS Deployment Port Management Configurable Port		•	•	÷	•	
QnoDDNS 3322/DynDNS Simultaneous Multiple DDNS Deployment Port Management Configurable Port Status Display VLAN		•	•	:	•	•
QnoDDNS 3322/DynDNS Simultaneous Multiple DDNS Deployment Port Management Configurable Port Status Display VLAN Mirror Port System Administration E-Bulletin	•	Future	Future	:	Future	Future
QnoDDNS 3322/DynDNS Simultaneous Multiple DDNS Deployment Port Management Configurable Port Status Display VLAN Mirror Port System Administration E-Bulletin Firmware Upgradeable	•	Future	Future	Future	Future	Future
QnoDDNS 3322/DynDNS Simultaneous Multiple DDNS Deployment Port Management Configurable Port Status Display VLAN Mirror Port System Administration E-Bulletin Firmware Upgradeable Web-based Management		Future	Future	•	Future	Future
QnoDDNS 3322/DynDNS Simultaneous Multiple DDNS Deployment Port Management Configurable Port Status Display VLAN Mirror Port System Administration E-Bulletin Firmware Upgradeable Web-based Management SNMP		Future	Future	Future	Future	Future
QnoDDNS 3322/DynDNS Simultaneous Multiple DDNS Deployment Port Management Configurable Port Status Display VLAN Mirror Port System Administration E-Bulletin Firmware Upgradeable Web-based Management SNMP Configuration Backup/Recover	Future	Future	Future	Future	Future	Future
QnoDDNS 3322/DynDNS Simultaneous Multiple DDNS Deployment Port Management Configurable Port Status Display VLAN Mirror Port System Administration E-Bulletin Firmware Upgradeable Web-based Management SNMP Configuration Backup/Recover Diagnostic Tool		Future	Future	Future	Future	Future Future
QnoDDNS 3322/DynDNS Simultaneous Multiple DDNS Deployment Port Management Configurable Port Status Display VLAN Mirror Port System Administration E-Bulletin Firmware Upgradeable Web-based Management SNMP Configuration Backup/Recover		Future	Future	Future	Future	Future
QnoDDNS 3322/DynDNS Simultaneous Multiple DDNS Deployment Port Management Configurable Port Status Display VLAN Mirror Port System Administration E-Bulletin Firmware Upgradeable Web-based Management SNMP Configuration Backup/Recover Diagnostic Tool NTP Synchronize System Monitoring System/Firewall Logging	Future	Future	Future	Future	Future	Future Future
QnoDDNS 3322/DynDNS Simultaneous Multiple DDNS Deployment Port Management Configurable Port Status Display VLAN Mirror Port System Administration E-Bulletin Firmware Upgradeable Web-based Management SNMP Configuration Backup/Recover Diagnostic Tool NTP Synchronize System Monitoring System/Firewall Logging Email Alarm	Future	Future	Future	Future	Future	Future Future Future
QnoDDNS 3322/DynDNS Simultaneous Multiple DDNS Deployment Port Management Configurable Port Status Display VLAN Mirror Port System Administration E-Bulletin Firmware Upgradeable Web-based Management SNMP Configuration Backup/Recover Diagnostic Tool NTP Synchronize System Monitoring System/Firewall Logging Emall Alarm Traffic Status	Future y	Future	Future	Future	Future	Future Future Future
QnoDDNS 3322/DynDNS Simultaneous Multiple DDNS Deployment Port Management Configurable Port Status Display VLAN Mirror Port System Administration E-Bulletin Firmware Upgradeable Web-based Management SNMP Configuration Backup/Recover Diagnostic Tool NTP Synchronize System Monitoring System/Firewall Logging Email Alarm	Future	Future	Future	Future	Future	Future Future Future

Model Name	QVF8220	
Hardware Spec		
Network Processor	MIPS64 1G Processing Speed	MIPS64 1G Processing Speed
Flash	32MB(256Mbit)	32MB(256Mbit)
DRAM	512MB(4096Mbit)	1GB(8192Mbit)
Network Interface		
WAN Port	4 (Gigabit)	4 (Gigabit)
DMZ Port	1 (Gigabit)	1 (Gigabit)
LAN Port	8 (Gigabit)	8 (Gigabit)
Performance		
NAT Acceleration	Hardware Accelerate	Hardware Accelerate
Session	300,000	300,000
NAT Throughput	2Gbps	2Gbps
VPN Throughput	-	3DES/175Mbps
MultiWAN Traffic Control		SDEG(TOMBPS
Line Backup		•
	•	
Network Detection		
Session-based Load Balance		•
IP-based Load Balance	•	•
Strategic Routing		•
Virtual Routing	Server Site	Server Site
WANConnection		
DHCP IP Assignment	•	•
Fixed IP Assignment	•	•
ADSL PPPoE	•	•
PPTP	•	•
Transparent Bridge		•
DHCP Server		
The number of assignable IP	4 Class C	4 Class C
IP & MAC Binding	•	•
MAC Address Control	•	•
QoS	•	•
Smart QoS	•	
Guarantee bandwidth		
Maximum bandwidth	•	
Priority	•	•
IP Grouping	•	•
Session Control by IP	•	•
Firewall		
Bi-direction ARP Binding	Future	Future
SPI/DoS Detect	•	•
Attack Logging	•	•
Access Control	•	•
URL/Keyword Filter	•	•
Block Java/Cookies/ActiveX/	1/21	
HTTP Proxy	•	•
Block QQ MSN Skype	Future	Future
IP Filter	- Tutule	• diame
Service Port Filter	•	
VPN		
VPN Tunnel		May 400
		Max 400
Authentication		MD5/SHA1
Encryption	100	DES/3DES/AES
IKE Key Management	-	•
VPN Passthrough	•	.
VPN Backup		•
VPN Hub		•
Group VPN	-9	•
NAT Traversal (NATT)	•	•
QVM SmartLink VPN Server	-	•
OVM SmartLink VPN Client		Enture
QVM SmartLink VPN Client OnoKey Server	÷:	Future

Model Name	QVF8220	QVF8230
SSL VPN		
Concurrent Users	5~300	5~700
SSL Encryption Type	128bit SHA1 (DES-CBC-SHA)	128bit SHA1 (DES-CBC-SHA)
Hardware Encryption	•	•
Support OS Platform	Windows / Linux / MAC OS	Windows / Linux / MAC OS
Authentication Server	Local DataBase / RADIUS /	Local DataBase/ RADIUS /
California de la calega de la c	Active Directory / LDAP / NT Domain	Active Directory / LDAP / NT Domain
Multi-Domain	•	• Annual
Internet Service Support	Web / Secure Web / FTP / Telnet / SSH	Web / Secure Web / FTP / Telnet / SSH
File Sharing Service	Word / Excel / Power Point /	Word / Excel / Power Point /
(Terminal Server)	Outlook / IE / Front Page	Outlook / IE / Front Page
Remote Desktop Service	RDP5 / VNC	RDP5 / VNC
NetBIOS		
Online Print	•	•
User Management	Group Management /	Group Management /
User Management	Single User Management	Single User Management
Single User Access Control	•	9.
Customized Portal	•	•
Cache Cleaner	•	•
Overtime Log Out	•	•
Virtual Passage	 (Windows / Linux / MAC OS) 	 (Windows / Linux / MAC OS)
Soft Keyboard	•	•
NAT		
One-to-One NAT	•	•
PAT Address Translation	•	•
DMZ/Virtual Server	•	•:
UPnP Support	Future	Future
IP Routing		
Static Routing	•	•
Dynamic Routing RIPI/II	•	•
DDNS		
QnoDDNS	•	•
3322/DynDNS	•	•
Simultaneous Multiple	•	-
DDNS Deployment		2"
Port Management		
Configurable Port	•	•
Status Display	•	
VLAN	•	•
Mirror Port	()	•:
System Administration		
E-Bulletin	Future	Future
Firmware Upgradeable	•	•
Web-based Management	•	•
SNMP	Future	Future
Configuration Backup/	•	•
Recovery	6	•
Diagnostic Tool		,
System Monitoring		
System/Firewall Logging	•	•
Email Alarm	Future	Future
Traffic Status	•	•
SNMP Trap	Future	Future
Recommended PC Number	1,000~1,200	1,000~1,200



Qno Technology Inc. 10F-2, No.25, Puding Rd., Hsinchu 300, Taiwan

Tel: +886-3-5678100 Fax: +886-3-6686255

Web: http://www.Qno.com.tw/english/ E-mail: QnoGlobalSales@qno.com.tw