



STORMSHIELD

Matrix

Technical Specifications



Solutions for specific environnements

		
PERFORMANCE*	SNI20	SNI40
Firewall throughput (1518 byte UDP)	2.4 Gbps	4.8 Gbps
Firewall throughput (IMIX)	1.4 Gbps	2.9 Gbps
IPS throughput (1518 byte UDP)	1.6 Gbps	3.3 Gbps
IPS throughput (1 Mo HTTP)	900 Mbps	1.8 Gbps
VPN IPSec throughput (AES-GCM)	600 Mbps	1.2 Gbps
NETWORK CONNECTIVITY*	SNI20	SNI40
Max number of VPN IPSec tunnels	100	500
Max number of VPN SSL tunnels	20	100
Max number of QoS queues	100	100
Max number of logical interfaces (agg, dialups, GRE, ipsec, loopback, pptp, vlans)	393	393
REDUNDANCY	SNI20	SNI40
High availability (Active/Passive)	✓	✓
Bypass (safety mode)	Optionnel	✓
HARDWARE	SNI20	SNI40
Copper 10/100/1000 interfaces	2-4	5
Fiber 1Gb interfaces	0-2	0-2
Storage (initial / optional)	SD card	32 Go SSD
Power supply	2x 12-48VDC 3-0.75A	2x 12-36 Vcc 5-1.67A
DIN rail format, fan less	✓	✓
TPM chipset	✓	×
Level of protection provided by the appliance (IP code, IEC60529)	IP30	IP30
INDUSTRIAL PROTOCOLS	SNI20	SNI40
Deep packet inspection (DPI)	Modbus, UMAS, S7 200-300-400, EtherNet/IP, CIP, OPC UA, OPC (DA/HDA/AE), BACnet/IP, PROFINET, SOFBUS/LACBUS, S7+, OMRON-FINS, IEC 60870-5-104, IEC 61850 (MMS, Goose and SV) and IT	

	
PERFORMANCE*	SNxr1200
Firewall throughput (1518 byte UDP)	2.4 Gbps
Firewall IMIX throughput	1.4 Gbps
IPS throughput (1518 byte UDP)	1.6 Gbps
IPS throughput (1 Mo HTTP)	900 Mbps
VPN IPSec throughput (AES-GCM)	600 Mbps
NETWORK CONNECTIVITY*	SNxr1200
Max number of VPN IPSec tunnels	100
Micro MIL-DTL-38999 connectors	✓
Max number of QoS queues	100
Max number of logical interfaces (agg, dialups, GRE, ipsec, loopback, pptp, vlans)	1 336
REDUNDANCY	SNxr1200
High availability (Active/Passive)	✓
HARDWARE	SNxr1200
Storage	128 Go SSD
Power supply	+28VDC (12VDC - 36VDC)
Fan less	✓
TPM chipset	✓
Level of protection provided by the appliance (IP code, IEC60529)	IP67
CERTIFICATIONS	SNxr1200
CE : EN55032/EN 55035 - SAFETY: EN62368-1 DO-160G / MIL-STD-461F / MIL-STD-810G ITAR FREE	

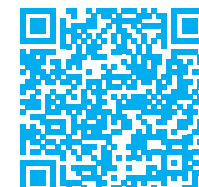
* Performance is measured in a laboratory and under conditions ideal for version 4.3.x.

Resultats may vary according to test conditions and the software version.

IMIX traffic with the following distribution:

- 60% of 66 bytes frame
- 25% of 512 bytes frame
- 15% of 1 518 bytes frame
- Average frame size : 395 bytes

More information about our **virtualised** solutions





NUMBER OF USERS*

STORMSHIELD										
NUMBER OF USERS*	SN160	SN-S-Series-220	SN-S-Series-320	SN-M-Series-520	SN-M-Series-720	SN-M-Series-920	SN1100	SN2100	SN3100	SN6100
Firewall usage	15	50	100	150	300	500	1,000	2,000	4,000	15,000
NGFW usage (all features enabled)	5	25	50	100	200	300	500	1,000	2,000	3,000
PERFORMANCE*	SN160	SN-S-Series-220	SN-S-Series-320	SN-M-Series-520	SN-M-Series-720	SN-M-Series-920	SN1100	SN2100	SN3100	SN6100
Firewall throughput (1518 byte UDP)	1 Gbps	4 Gbps	8 Gbps	10 Gbps	18 Gbps	36 Gbps	45 Gbps	60 Gbps	74 Gbps	170 Gbps
Firewall + IPS throughput (1518 byte UDP)	1 Gbps	2 Gbps	4 Gbps	5 Gbps	10 Gbps	16 Gbps	18 Gbps	35 Gbps	55 Gbps	68 Gbps
Firewall + IPS throughput (1 Mo HTTP files)	400 Mbps	1 Gbps	2 Gbps	2,5 Gbps	5 Gbps	10 Gbps	12 Gbps	20 Gbps	23 Gbps	27 Gbps
Firewall throughput (IMIX)	800 Mbps	3.2 Gbps	5.2 Gbps	7 Gbps	9 Gbps	15 Gbps	17 Gbps	19.2 Gbps	30.7 Gbps	53.3 Gbps
VPN IPsec throughput - AES256/SHA2	200 Mbps	1.1 Gbps	1.9 Gbps	2.1 Gbps	2.6 Gbps	3.4 Gbps	4 Gbps	6 Gbps	8 Gbps	12.3 Gbps
VPN IPsec throughput - AES-GCM	74 Mbps	1 Gbps	2 Gbps	2.5 Gbps	4 Gbps	6 Gbps	7.5 Gbps	10 Gbps	15 Gbps	20 Gbps
DR VPN IPsec throughput - AES-GCM-16/128 SHA2-256	60 Mbps	800 Mbps	1.6 Gbps	1.8 Gbps	3 Gbps	4.5 Gbps	5.7 Gbps	5.7 Gbps	11.4 Gbps	17.1 Gbps
Antivirus throughput (HTTP)	200 Mbps	500 Mbps	1 Gbps	1.3 Gbps	3 Gbps	3.5 Gbps	4 Gbps	7 Gbps	10 Gbps	12.5 Gbps
Concurrent connections	150,000	300,000	400,000	600,000	1,000,000	1,500,000	1,800,000	2,500,000	5,000,000	20,000,000
New connections per second	7,500	20,000	25,000	30,000	50,000	80,000	90,000	125,000	175,000	250,000
NETWORK CONNECTIVITY*	SN160	SN-S-Series-220	SN-S-Series-320	SN-M-Series-520	SN-M-Series-720	SN-M-Series-920	SN1100	SN2100	SN3100	SN6100
Number of rules (recommended / specific configuration)	1,024 / 4,096	2,048 / 8,192	2,048 / 8,192	4,096 / 16,384	8,192 / 32,768	8,192 / 32,768	8,192 / 32,768	8,192 / 32,768	8,192 / 32,768	8,192 / 32,768
Max number of static routes	512	512	512	5,120	5,120	5,120	7,680	10,240	10,240	10,240
Max number of dynamic routes	1,000	10,000	10,000	10,000	10,000	10,000	10,000	500,000	500,000	500,000
Max number of VPN IPsec tunnels	50	100	100	1,000	1,000	2,000	2,000	5,000	5,000	5,000
Max number of VPN SSL tunnels (tunnel mode)	5	50	100	150	300	500	800	1 000	1 000	1 000
Max number of QoS queues	20	100	100	100	100	100	100	255	255	255
Max number of logical interfaces (agg, dialups, GRE, ipsec, loopback, pptp, vlans)	137	393	393	1,336	1,336	1,336	1,336	1,336	1,336	1,336
Size of the ARP table	8,704	20,480	36,864	36,864	36,864	36,864	413,696	282,624	413,696	1,593,344
REDUNDANCY	SN160	SN-S-Series-220	SN-S-Series-320	SN-M-Series-520	SN-M-Series-720	SN-M-Series-920	SN1100	SN2100	SN3100	SN6100
High availability (Active/Passive)	×	✓	✓	✓	✓	✓	✓	✓	✓	✓
Redundant power supply	×	Optional	Optional	✓	✓	✓	Optional	Optional	✓	✓
Redundant disk (RAID 1)	×	×	×	×	×	×	×	Optional	✓	✓
HARDWARE	SN160	SN-S-Series-220	SN-S-Series-320	SN-M-Series-520	SN-M-Series-720	SN-M-Series-920	SN1100	SN2100	SN3100	SN6100
10/100/1000 copper interfaces	1 + 4 ports (switch)	-	-	0-8	0-8	0-8	8-24	2-26	2-26	8-64
100/1000/2500 copper interfaces	-	8	8	8-16	8-16	8-16	-	0-8	0-8	-
1Gb fiber interfaces	-	1	1	2-10	0-8	0-8	0-16	0-24	0-24	0-64
10Gb fiber interfaces (dual speed)	-	-	-	0-4	2-6	2-6	2-10	0-12	0-12	0-34
10Gb copper interfaces	-	-	-	0-4	0-4	0-4	0-8	0-12	0-12	0-34
40Gb fiber interfaces	-	-	-	-	-	-	-	0-6	0-6	0-16
Optional extension modules	-	-	-	1	1	1	2	3	3	7
TPM chipset	×	✓	✓	✓	✓	✓	✓	×	✓	×
Initial storage	-	-	-	256 GB SSD	256 GB SSD	256 GB SSD	512 GB SSD	256 GB SSD	256 GB SSD	512 GB SSD
Optional storage	SD card	MicroSD card	MicroSD card	-	-	-	-	1 TB SSD	1 TB SSD	1 TB SSD
Size / Format	Desktop	Desktop	Desktop	1U 19"	1U 19"	1U 19"	1U 19"	1U 19"	1U 19"	2U 19"