



TECHNICAL SPECIFICATIONS

Guardian Sensors

Large Enterprise, Mid-Enterprise, Specialized Requirements,
Virtual Environments, Federal Systems, Embedded Offerings

Guardian Sensors for the Large Enterprise



NSG-HS Series

Rack-mounted sensors for real-time OT/IoT visibility, cybersecurity and monitoring.

- ◆ 300,000 - 500,000 Nodes
- ◆ 6 Max. Throughput



NSG-H Series

Rack-mounted sensors for real-time OT/IoT visibility, cybersecurity and monitoring.

- ◆ 100,000 - 200,000 Nodes
- ◆ 3 Gbps Max. Throughput



NS5000 Series

Rack-mounted sensors for real-time OT/IoT visibility, cybersecurity and monitoring

- ◆ 100,000 – 500,000 Nodes
- ◆ 6 Gbps Max. Throughput

	NSG-HS 3500	NSG-HS 3000	NSG-H 2500	NSG-H 2000	NS5000 ⁶
Max. Protected Nodes	500,000	300,000	200,000	100,000	100,000 – 500,000
Max. Protected Network Elements¹	2,000,000	1,500,000	1,200,000	1,000,000	1,000,000 – 2,000,000
Max. Protected Smart IoT Devices²	3,000,000	1,800,000	1,200,000	600,000	500,000 – 1,500,000
Max. Throughput³	6 Gbps		3 Gbps		6 Gbps
Max. Remote Collectors⁴	50		50		50
Monitoring Ports	Modular, 12 customizable 4 x SFP+ available by default (SFP+ transceivers not included) 1 x RJ45 available by default Up to 17 total ports		Modular, 4 customizable 4 x SFP+ available by default 1 x RJ45 available by default Up to 9 total ports		1 x 2.5GBase-T and up to 24 additional ports via expansion slots
Management Ports	1x1000BASE-T		1x1000BASE-T		1 x 2.5GBase-T
Expansion Slots	3 slots available: 4 x 1000BaseT 4 x SFP 4 x SFP+		1 slot available: 4 x 1000BaseT 4 x SFP 4 x SFP+		3 slots available: 4 or 8 x 1000 BaseT 4 or 8 x SFP 4 or 8 x SFP+
Storage	512 GB for OS and Data		512 GB for OS and Data		64GB for OS 2 x 640GB for Data (RAID 1)
Form Factor⁵	1 rack unit		1 rack unit		1 rack unit
Max. Power Consumption	750 W		750 W		500W
Power Supply	Dual 100-240V AC 36 - 72V DC		Dual 100-240V AC 36 - 72V DC		Dual 127 - 240V AC 46 - 72V DC
Temperature Range (°F/°C)	32 - 104 / 0 - 40		32 - 104 / 0 - 40		32 - 104 / 0 - 40
HxWxL (in/mm)	1.73 x 17.24 x 23.60 / 44 x 438 x 600		1.73 x 17.24 x 23.60 / 44 x 438 x 600		25.59x17.24x1.72 / 650x438x43.8
Weight (lb/kg)	39.68 / 18		37.47 / 17		27 / 12.25
Certifications	CE FCC UL		CE FCC UL		100,000 – 500,000
Minimum Supported N2OS version	24.0		24.0		26.5

¹ Network Elements: The sum of nodes, links, and variables. ² Smart IoT Devices: The concept of "Smart IoT device" covers devices communicating in an intermittent way and resulting in low throughput. ³ All performance values are "up to" and vary depending on the analyzed traffic. ⁴ See Remote Collector tech specs for more details. ⁵ 19" 4 post rack-mountable only. ⁶ The NS5000 supports 2,000, 2,500, 3,000, and 3,500 tier software licenses. For complete and current tech specs, visit: nozominetworks.com/techspecs, or contact us.

Guardian Sensors for the Mid-Enterprise



NS20 Series

Rack-mounted sensors for real-time OT/IoT visibility, cybersecurity and monitoring.

- ◆ 10,000 - 40,000 Nodes
- ◆ 1 Gbps Max. Throughput



NS1 Series

Rack-mounted sensor for real-time OT/IoT visibility, cybersecurity and monitoring.

- ◆ 1,000 - 5,000 Nodes
- ◆ 500 Mbps Throughput

	NS20 1000	NS20 750	NS1 250	NS1 100
Max. Protected Nodes	40,000	10,000	5,000	1,000
Max. Protected Network Elements ¹	600,000	200,000	90,000	20,000
Max. Protected Smart IoT Devices ²	200,000	50,000	20,000	5,000
Max. Throughput ³	1 Gbps		500 Mbps	
Max. Remote Collectors ⁴	50		20	
Monitoring Ports	9x1000BASE-T + 4xSFP		7x1000BASE-T	
Management Ports	1x1000BASE-T		1x1000BASE-T	
Expansion Slots	2 slots available 4x1000BASE-T 4xSFP 4xSFP+		1 slot available 4x1000BASE-T 4xSFP	
Storage	32GB for OS 2 x 256GB for Data (RAID 1)		128 GB for OS and Data	
Form Factor	1 rack unit ⁵		1 rack unit ⁶	
Max. Power Consumption	300W		220W	
Power Supply	Dual 100 - 240V AC		Single 100 - 240V AC	
Temperature Range (°F/°C)	32 - 104 / 0 - 40		32 - 104 / 0 - 40	
HxWxL (in/mm)	1.73 x 17.3 x 19.74 / 44 x 438 x 501		1.75 x 17.3 x 12.7 / 44 x 438 x 321	
Weight (lb/kg)	36.37 / 16.5		19.4 / 8.8	
Certifications	CE FCC UL CB		CE FCC UL CB	

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Guardian Sensors for Specialized Requirements



Ruggedized Series

Ruggedized sensors for real-time OT/IoT visibility, cybersecurity and monitoring.

- ◆ 500 - 5,000 Nodes
- ◆ 100 - 800 Mbps Max. Throughput



Portable

Portable sensor for real-time OT/IoT visibility, cybersecurity and monitoring.

- ◆ 2,500 Nodes
- ◆ 200 Mbps Max. Throughput

	NG-500R	NS1R	P550
Max. Protected Nodes	5,000	500	2,500
Max. Protected Network Elements ¹	80,000	10,000	50,000
Max. Protected Smart IoT Devices ²	30,000	2,500	12,500
Max. Throughput ³	800 Mbps	250 Mbps	200 Mbps
Max. Remote Collectors ⁴	30	10	Not available
Monitoring Ports	3x1000BASE-T	1x1000Base-T + 2xSFP	5x1000BASE-T
Management Ports	1x1000BASE-T	1x1000BASE-T	1x1000BASE-T
Expansion Slots	2 slots available: 4 x 1000BASE-T 4 x SFP	Not available	Not available
Storage	32GB for OS 2 x 256GB for Data (RAID 1)	64 GB for OS and Data	256 GB for OS and Data
Form Factor	3 rack unit ⁵	DIN mountable	Desktop with wall mount kit
Max. Power Consumption	115W	27W	38W
Power Supply	Dual 100 - 240V AC 16.6 - 160V DC	9 - 36V CD Single AC/DC external power supply for 100/240VAC included (Dual power supply supported)	Single (External) 90 - 240V AC or 12 - 30V DC
Temperature Range (°F/°C)	-40 - 158 / -40 - 70	-40 - 158 / -40 - 70	32 - 140 / 0 - 60
HxWxL (in/mm)	5.18 x 17.2 x 11.8 / 132 x 438 x 300	5.9 x 2.65 x 5.9 / 149 x 67 x 128	2.75 x 7.08 x 9.44 / 70 x 180 x 240
Weight (lb/kg)	18.74 / 8.5	3.9 / 1.8	5.5 / 2.5
Certifications	CE FCC UL CB	CE FCC UL	CE FCC UL

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Guardian Sensors for Virtual Environments



Virtual Series

Virtual sensors for real-time OT/IoT visibility, cybersecurity and monitoring.

- ◆ 1,000 - 40,000 Nodes
- ◆ 1 Gbps Max. Throughput

	V1000	V750	V250	V100
Max. Protected Nodes	40,000	10,000	5,000	1,000
Max. Protected Network Elements ¹	600,000	200,000	90,000	20,000
Max. Protected Smart IoT Devices ²	200,000	50,000	20,000	5,000
Max. Throughput ³	1 Gbps	1 Gbps	1 Gbps	1 Gbps
Scenarios	Enterprise	Large	Medium	Small
Deployment Options	VMware, Hyper-V, KVM, and XEN			
Max. Remote Collectors ⁴	50	50	20	20

¹ Network Elements: The sum of nodes, links, and variables. ² Smart IoT Devices: The concept of “Smart IoT device” covers devices communicating in an intermittent way and resulting in low throughput. ³ Performance is dependent upon hardware configuration and resource allocation. ⁴ See Remote Collector tech specs for more details. For complete and current tech specs, visit: nozominetworks.com/techspecs, or contact us.

Guardian Sensors for Federal Systems

FIPS 140-2 Compliant Edition

Feature add-on where all encrypted communications will be done with a FIPS 140-2 compliant library.

- ◆ The FIPS 140-2 compliant Guardian platform will not be able to communicate with non-FIPS compliant Nozomi Networks platforms.

Embedded Offerings

Siemens Platforms

Embedded container sensor for switches, routers and other security infrastructure.

- ♦ **Fast, flexible deployment options that leverage your existing devices.**

	Guardian	Remote Collector
Bare Metal	Siemens Ruggedcom APE*	Not available
Container	Any platform that supports Docker containers	Siemens LPE

*Ruggedcom RX Platform is capable of hosting the APE module

	Siemens Ruggedcom APE 1808 on 1500/1501 rack-mountable multi-service platforms	Siemens LPE
Max. Protected Nodes	1,000	Not applicable
Max. Protected Network Elements ¹	14,000	Not applicable
Max. Protected Smart IoT Devices ²	5,000	Not applicable
Max. Throughput ³	100 Mbps	30 Mbps
Max. Remote Collectors ⁴	Not rated	Not applicable
Monitoring Ports	4x1000BASE-T	3x1000Base-T
Management Ports	1x1000BASE-T	1x1000BASE-T
Expansion slots	Not available	Not available
Form Factor	1 rack unit	DIN mountable
Max. Power Consumption	12 W	16 W
Power Supply	Up to 2 Power Supplies 48 VDC and/or 88 VDC 12 VDC and 24 VDC	Up to 2 Power Supplies 24 VDC
Operating Temperature Range (°F/°C)	-40 - 185 / -40 - 85	-40 - 140 / -40 - 60
HxWxL (in/mm)	1.74 x 11.68 x 17.36 / 44.2 x 296.7 x 440.9	5.8 x 5.3 x 5 / 147 x 134 x 127
Weight (lb/kg)	10.36 / 4.7	3.5 / 1.6

¹ Network Elements: The sum of nodes, links, and variables. ² Smart IoT Devices: The concept of "Smart IoT device" covers devices communicating in an intermittent way and resulting in low throughput. ³ Performance is dependent upon hardware configuration and resource allocation. ⁴ See Remote Collector tech specs for more details. For complete and current tech specs, visit: nozominetworks.com/techspecs, or contact us.



Cybersecurity for OT, IoT and Critical Infrastructure

Nozomi Networks protects the world's critical infrastructure from cyber threats. Our platform uniquely combines network and endpoint visibility, threat detection, and AI-powered analysis for faster, more effective incident response. Customers rely on us to minimize risk and complexity while maximizing operational resilience.