



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 Gbps 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

	NSG-HS 3500	NSG-HS 3000	NSG-H 2500	NSG-H 2000
Max. Protected Nodes	500,000	300,000	200,000	100,000
Max. Protected Network Elements <sup>1</sup>	2,000,000	1,500,000	1,200,000	1,000,000
Max. Protected Smart IoT Devices <sup>2</sup>	3,000,000	1,800,000	1,200,000	600,000
Max. Throughput <sup>3</sup>	6 Gbps		3 Gbps	
Max. Remote Collectors <sup>4</sup>	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	
Management Ports	1x1000BASE-T		1x1000BASE-T	
Expansion Slots	3 slots available: 3 x 1000BaseT   3 x SFP   3 x SFP+		1 slot available: 1 x 1000BaseT   1 x SFP   1 x SFP+	
Storage	512 GB for OS and Data		512 GB for OS and Data	
Form Factor	1 rack unit		1 rack unit	
Max. Power Consumption	750 W		750 W	
Power Supply	Dual 100-240V AC 36 - 72V DC		Dual 100-240V AC 36 - 72V DC	
Temperature Range (°F/°C)	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	
Weight (lb/kg)	39.68 / 18		37.47 / 17	
Certifications	CE, FCC, UL		CE, FCC, UL	

<sup>1</sup> Network Elements: The sum of nodes, links, and variables. <sup>2</sup> Smart IoT Devices: The concept of "Smart IoT device" covers devices communicating in an intermittent way and resulting in low throughput. <sup>3</sup> All performance values are "up to" and vary depending on the analyzed traffic. <sup>4</sup> See Remote Collector tech specs for more details. For complete and current tech specs, visit: [nozominetworks.com/products/technical-specifications](https://nozominetworks.com/products/technical-specifications), or contact us.

# Guardian Sensors for the Mid-Enterprise



## NSG-M Series

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

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

	NSG-M 1000	NSG-M 750
Max. Protected Nodes	40,000	10,000
Max. Protected Network Elements <sup>1</sup>	600,000	200,000
Max. Protected Smart IoT Devices <sup>2</sup>	200,000	50,000
Max. Throughput <sup>3</sup>	1 Gbps	
Max. Remote Collectors <sup>4</sup>	50	
Monitoring Ports	7x1000BASE-T + 4xSFP	
Management Ports	1x1000BASE-T	
Expansion Slots	1 slot available: 4 x 1000BASE-T   4 x SFP   4 x SFP+	
Storage	256 GB for OS and Data	
Form Factor	1 rack unit	
Max. Power Consumption	360W	
Power Supply	Single 100 - 240V AC	
Temperature Range (°F/°C)	0 - 113 / 0 - 45	
HxWxL (in/mm)	1.73 x 17.24 x 16.89 / 44 x 438 x 429	
Weight (lb/kg)	30.8 / 14	
Certifications	CE, FCC, UL	

<sup>1</sup> Network Elements: The sum of nodes, links, and variables. <sup>2</sup> Smart IoT Devices: The concept of "Smart IoT device" covers devices communicating in an intermittent way and resulting in low throughput. <sup>3</sup> All performance values are "up to" and vary depending on the analyzed traffic. <sup>4</sup> See Remote Collector tech specs for more details. For complete and current tech specs, visit: [nozominetworks.com/products/technical-specifications](https://nozominetworks.com/products/technical-specifications), 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 <sup>1</sup>	600,000	200,000	90,000	20,000
Max. Protected Smart IoT Devices <sup>2</sup>	200,000	50,000	20,000	5,000
Max. Throughput <sup>3</sup>	1 Gbps		500 Mbps	
Max. Remote Collectors <sup>4</sup>	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		1 rack unit	
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	

<sup>1</sup> Network Elements: The sum of nodes, links, and variables. <sup>2</sup> Smart IoT Devices: The concept of "Smart IoT device" covers devices communicating in an intermittent way and resulting in low throughput. <sup>3</sup> All performance values are "up to" and vary depending on the analyzed traffic. <sup>4</sup> See Remote Collector tech specs for more details. For complete and current tech specs, visit: [nozominetworks.com/products/technical-specifications](https://nozominetworks.com/products/technical-specifications), or contact us.

# Guardian Sensors for Specialized Requirements



## Ruggedized Series

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

- ◆ 500 - 5,000 Nodes
- ◆ 100 - 250 Mbps Max. Throughput



## Portable

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

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

	NG-500R	NSG-R 50	P550
Max. Protected Nodes	5,000	500	2,500
Max. Protected Network Elements <sup>1</sup>	80,000	10,000	50,000
Max. Protected Smart IoT Devices <sup>2</sup>	30,000	2,500	12,500
Max. Throughput <sup>3</sup>	800 Mbps	100 Mbps	200 Mbps
Max. Remote Collectors <sup>4</sup>	30	10	Not available
Monitoring Ports	3x1000BASE-T	4x1000BASE-T	5x1000BASE-T
Management Ports	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	DIN mountable	Desktop with wall mount kit
Max. Power Consumption	115W	60W	38W
Power Supply	Dual 100 - 240V AC 16.6 - 160V DC	Single (External) 100 - 240V AC or 12 - 36V DC	Single (External) 90 - 240V AC or 12 - 30V DC
Temperature Range (°F/°C)	-40 - 158 / -40 - 70	-40 - 167 / -40 - 75	32 - 140 / 0 - 60
HxWxL (in/mm)	5.18 x 17.2 x 11.8 / 132 x 438 x 300	3.15 x 5.11 x 5.74 / 80 x 130 x 146	2.75 x 7.08 x 9.44 / 70 x 180 x 240
Weight (lb/kg)	18.74 / 8.5	6.61 / 3	5.5 / 2.5
Certifications	CE, FCC, UL, CB	CE, FCC, UL	CE, FCC, UL

<sup>1</sup> Network Elements: The sum of nodes, links, and variables. <sup>2</sup> Smart IoT Devices: The concept of "Smart IoT device" covers devices communicating in an intermittent way and resulting in low throughput. <sup>3</sup> All performance values are "up to" and vary depending on the analyzed traffic. <sup>4</sup> See Remote Collector tech specs for more details. For complete and current tech specs, visit: [nozominetworks.com/products/technical-specifications](https://nozominetworks.com/products/technical-specifications), or contact us.

# 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 <sup>1</sup>	600,000	200,000	90,000	20,000
Max. Protected Smart IoT Devices <sup>2</sup>	200,000	50,000	20,000	5,000
Max. Throughput <sup>3</sup>	1 Gbps	1 Gbps	1 Gbps	1 Gbps
Scenarios	Enterprise	Large	Medium	Small
Deployment Options	VMware, Hyper-V, KVM, and XEN			
Max. Remote Collectors <sup>4</sup>	50	50	20	20

<sup>1</sup> Network Elements: The sum of nodes, links, and variables. <sup>2</sup> Smart IoT Devices: The concept of “Smart IoT device” covers devices communicating in an intermittent way and resulting in low throughput. <sup>3</sup> Performance is dependent upon hardware configuration and resource allocation. <sup>4</sup> See Remote Collector tech specs for more details. For complete and current tech specs, visit: [nozominetworks.com/products/technical-specifications](https://nozominetworks.com/products/technical-specifications), 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 <sup>1</sup>	14,000	Not applicable
Max. Protected Smart IoT Devices <sup>2</sup>	5,000	Not applicable
Max. Throughput <sup>3</sup>	100 Mbps	30 Mbps
Max. Remote Collectors <sup>4</sup>	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

<sup>1</sup> Network Elements: The sum of nodes, links, and variables. <sup>2</sup> Smart IoT Devices: The concept of "Smart IoT device" covers devices communicating in an intermittent way and resulting in low throughput. <sup>3</sup> Performance is dependent upon hardware configuration and resource allocation. <sup>4</sup> See Remote Collector tech specs for more details. For complete and current tech specs, visit: [nozominetworks.com/products/technical-specifications](https://nozominetworks.com/products/technical-specifications), 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.