

# Outdoor Video Surveillance systems

## Outdoor access Nodes NSBox

Designing distributed IP video surveillance networks involves splitting the network into subnets or nodes that are responsible for the uninterrupted operation of a block of video cameras connected to this node. For troubleproof and correct operation of an outdoor video camera, a reliable power supply, a reliable data transmission channel and surge protection of any wired connections are necessary. Any security system turns into a piece of iron during power failure.

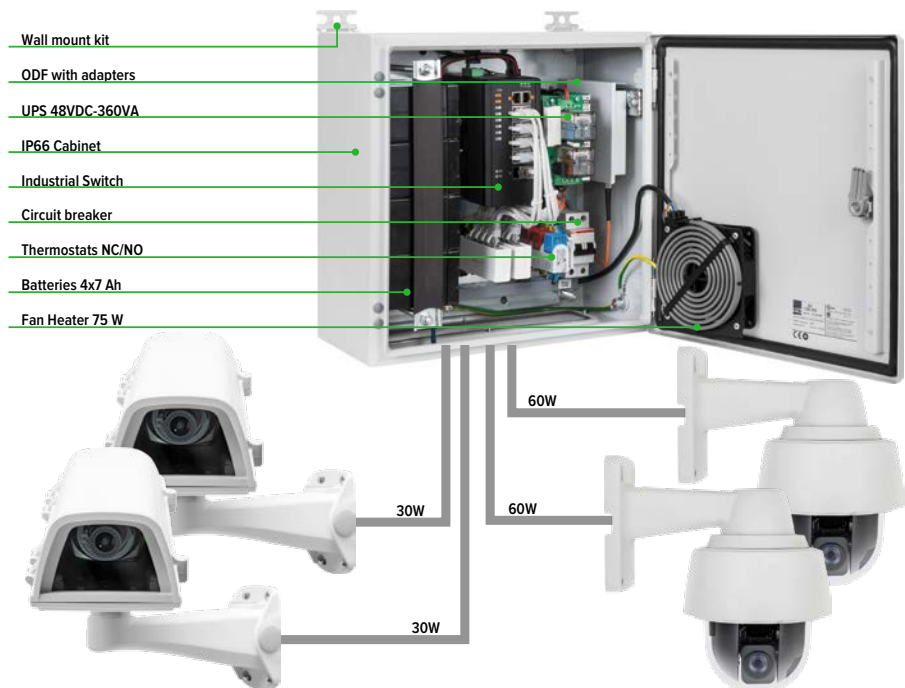
The NSBox access Nodes are devised for the organization of protected outdoor video surveillance systems. The access Node has equipment inside the enclosure that provides protection and reliable operation of the IP cameras and switching IP-video traffic to the processing and storage center via fiber optic or wireless network.



The NSBox access Node is a completed product for installation and operation in any climates, which is immediately switched on in the operating mode. The device has one 110-220VAC external power line, up to 16 Ethernet ports for connecting IP video cameras, wireless access points or other PoE equipment and up to 4 Uplink Ethernet for communication with another access nodes or an aggregation center.

The NSBox access Nodes are mounted in NSB-xxx series enclosures with IP66 protection. The basic kit includes a mounting plate with DIN-Rails, terminal blocks, a circuit breaker and a set of sealed cable glands for electrical cables and optical fibers. In addition to this, additional modules can be included in the assembly of Nodes:

- Climatic control system inside cabinet: thermostats, heating element with fans
- Uninterruptible Power Supply: 12, 24 or 48VDC, 220VAC; 150 - 500VA; with batteries 7Ah or 12Ah
- Industrial PoE Switch with 4-16 ports
- Fiber Optic Distribution Frame (ODF): 4/8 FC adapters, pigtails, patch cords
- Surge protection elements for Ethernet ports and power circuits
- Various detectors and sensors
- Wall or pole Mount Kit
- Rain Roof, Lock, etc.
- Power Supply 24VAC for PTZ
- Socket for mounting on DIN Rails
- Indoor lighting kit for enclosure
- Thermoelectric Coolers



NSBox access Nodes are ideal solution for time-saving deployment of Ethernet network required for IP surveillance in outdoor applications such as highways, traffic light poles, parking lots surveillance, parks, hotels, stadiums, police departments, seaports, airports, etc.

## Basic kits of Outdoor access Nodes NSBox-xxxx

NSBox with Unmanaged PoE Switches		1 - 2 ports PoE
NSBox-121	NSBox-121: NSB-3030H1F1 enclosure, NIC-3200-102PCG switch, 48VDC-100W Power supply, Uplink 2 Gigabit (SFP socket + TP), 2 ports 10/100/1000M PoE 30W for IP cameras	
NSBox-121-61 60W x1	NSBox-121-61: NSB-3030H1F1 enclosure, NIC-3200-163PCG switch, 48VDC-100W Power supply, Uplink 3 Gigabit (SFP socket + 2 TP), 1 port 10/100/1000M High-Power PoE 60W for IP cameras	
		4 ports PoE
NSBox-244-61 60W x1	NSBox-244-61: NSB-3040H1F1 enclosure, NIS-3200-204PSG61 switch, 48VDC-240W Power supply, Uplink 2 Gigabit SFP, 4 ports 10/100/1000M PoE (3x 30W + 1x 60W High-Power PoE) for IP cameras	
NSBox-244-R61 60W x1	NSBox-244-R61: NSB-3838H1F1 enclosure, NIS-3200-204PSG61 switch, 48VDC-240VA UPS (4x 7Ah), Uplink 2 Gigabit SFP, 4 ports 10/100/1000M PoE (3x 30W + 1x 60W High-Power PoE) for IP cameras	
NSBox-244-62 60W x2	NSBox-244-62: NSB-3040H1F1 enclosure, NIS-3200-204PSG62 switch, 48VDC-240W Power supply, Uplink 2 Gigabit SFP, 4 ports 10/100/1000M PoE (2x 30W + 2x 60W High-Power PoE) for IP cameras	
NSBox-244-R62 60W x2	NSBox-244-R62: NSB-3838H1F1 enclosure, NIS-3200-204PSG62 switch, 48VDC-240VA UPS (4x 7Ah), Uplink 2 Gigabit SFP, 4 ports 10/100/1000M PoE (2x 30W + 2x 60W High-Power PoE) for IP cameras	
NSBox-244-64 60W x4	NSBox-244-64: NSB-3040H1F1 enclosure, NIS-3200-204PSG64 switch, 48VDC-360W Power supply, Uplink 2 Gigabit SFP, 4 ports 10/100/1000M PoE (4x 60W High-Power PoE) for IP cameras	
NSBox-244-R64 60W x4	NSBox-244-R64: NSB-3838H1F1 enclosure, NIS-3200-204PSG64 switch, 48VDC-360VA UPS (4x 7Ah), Uplink 2 Gigabit SFP, 4 ports 10/100/1000M PoE (4x 60W High-Power PoE) for IP cameras	
NSBox-245	NSBox-245: NSB-3040H1F1 enclosure, NIS-3200-205PSG switch, 48VDC-150W Power supply, Uplink 2 Gigabit (SFP + TP/SFP combo), 4 ports 10/100/1000M PoE 30W for IP cameras	
NSBox-245-R	NSBox-245-R: NSB-3838H1F1 enclosure, NIS-3200-205PSG switch, 48VDC-155VA UPS (4x 2.2Ah), Uplink 2 Gigabit (SFP + TP/SFP combo), 4 ports 10/100/1000M PoE 30W for IP cameras	
		8 ports PoE
NSBox-182	NSBox-182: NSB-3040H1F1 enclosure, NIS-3200-208PSG switch, 48VDC-360W Power supply, Uplink 2 Gigabit SFP/TP Combo, 8 ports 10/100/1000M PoE 30W for IP cameras	
NSBox-182-E EXTRA	NSBox-182-E: NSB-3860H1F1 enclosure, NIS-3200-208PSG switch, 48VDC-360W Power supply, Uplink 2 Gigabit SFP/TP Combo, 8 ports 10/100/1000M PoE 30W for IP cameras	
NSBox-182-R	NSBox-182-R: NSB-3838H1F1 enclosure, NIS-3200-208PSG switch, 48VDC-360VA UPS (4x 7Ah), Uplink 2 Gigabit SFP/TP Combo, 8 ports 10/100/1000M PoE 30W for IP cameras	
NSBox-182-R6	NSBox-182-R6: NSB-3860H2F1 enclosure, NIS-3200-208PSG switch, 48VDC-360VA UPS (4x 7Ah), Uplink 2 Gigabit SFP/TP Combo, 8 ports 10/100/1000M PoE 30W for IP cameras	
		16 ports PoE
NSBox-182-W TWIN	NSBox-182-W: NSB-3860H1F1 enclosure, 2x NIS-3200-208PSG switch, 48VDC-500W Power supply, Uplink 2 Gigabit SFP/TP Combo, 16 ports 10/100/1000M PoE 30W for IP cameras	
NSBox with Managed PoE Switches L2/L2+		4 ports PoE
NSBox-264	NSBox-264: NSB-3040H1F1 enclosure, NIS-3500-3224PGE switch, 48VDC-150W Power supply, Gigabit Uplink 2 SFP + 2 TP, 4 ports 10/100/1000M PoE 30W for IP cameras, Reboot PDs	
NSBox-264-R	NSBox-264-R: NSB-3838H1F1 enclosure, NIS-3500-3224PGE switch, 48VDC-155VA UPS (4x 7Ah), Gigabit Uplink 2 SFP + 2 TP, 4 ports 10/100/1000M PoE 30W for IP cameras, Reboot PDs	
		8 ports PoE
NSBox-480	NSBox-480: NSB-3838H1F1 enclosure, NIS-3500-3408PGE switch, 48VDC-360W Power supply, Uplink 4 Gigabit SFP, 8 ports 10/100/1000M PoE 30W for IP cameras, Reboot PDs	
NSBox-480-E EXTRA	NSBox-480-E: NSB-3860H1F1 enclosure, NIS-3500-3408PGE switch, 48VDC-360W Power supply, Uplink 4 Gigabit SFP, 8 ports 10/100/1000M PoE 30W for IP cameras, Reboot PDs	
NSBox-480-R	NSBox-480-R: NSB-3838H1F1 enclosure, NIS-3500-3408PGE switch, 48VDC-360VA UPS (4x 7Ah), Uplink 4 Gigabit SFP, 8 ports 10/100/1000M PoE 30W for IP cameras, Reboot PDs	
NSBox-480-R6	NSBox-480-R6: NSB-3860H2F1 enclosure, NIS-3500-3408PGE switch, 48VDC-360VA UPS (4x 7Ah), Uplink 4 Gigabit SFP, 8 ports 10/100/1000M PoE 30W for IP cameras, Reboot PDs	
NSBox-480-62 60W x2	NSBox-480-62: NSB-3838H1F1 enclosure, NIS-3500-3226PGE switch, 48VDC-360W Power supply, Gigabit Uplink 2 SFP + 2 TP, 8 ports 10/100/1000M PoE (2x 60W + 6x 30W) for IP cameras, Reboot PDs	
NSBox-480-R62 60W x2	NSBox-480-R62: NSB-3838H1F1 enclosure, NIS-3500-3226PGE switch, 48VDC-360VA UPS (4x 7Ah), Gigabit Uplink 2 SFP + 2 TP, 8 ports 10/100/1000M PoE (2x 60W + 6x 30W) for IP cameras, Reboot PDs	
NSBox-281	NSBox-281: NSB-3040H1F1 enclosure, NIS-3500-3208PC switch, 48VDC-360W Power supply, Uplink 2 x1000M SFP, 8 ports 10/100M PoE 30W for IP cameras, Reboot PDs	
NSBox-281-R	NSBox-281-R: NSB-3838H1F1 enclosure, NIS-3500-3208PC switch, 48VDC-240VA UPS (4x 7Ah), Uplink 2 x1000M SFP, 8 ports 10/100M PoE 30W for IP cameras, Reboot PDs	
NSBox-281-R6	NSBox-281-R6: NSB-3860H2F1 enclosure, NIS-3500-3208PC switch, 48VDC-240VA UPS (4x 7Ah), Uplink 2 x1000M SFP, 8 ports 10/100M PoE 30W for IP cameras, Reboot PDs	
		up to 16 ports PoE
NSBox-460	NSBox-480: NSB-3838H1F1 enclosure, NIS-3500-3416PGE switch, 48VDC-360W Power supply, Uplink 4 Gigabit SFP, 16 ports 10/100/1000M (8x PoE 30W) for IP cameras	

### Basic Kits of NSB-xxxx enclosures

NSB-2020	Cabinet 200x200x120, set [1], w/o Climate system, w/o ODF, H(-) F(-)
NSB-2031	Cabinet 200x300x120, set [1], w/o Climate system, w/o ODF, H(-) F(-)
NSB-2030	Cabinet 200x300x155, set [1], w/o Climate system, w/o ODF, H(-) F(-)
NSB-3030	Cabinet 300x300x210, set [1], w/o Climate system, w/o ODF, H(-) F(-)
NSB-3040	Cabinet 300x400x210, set [1], w/o Climate system, w/o ODF, H(-) F(-)
NSB-3838	Cabinet 380x380x210, set [1], w/o Climate system, w/o ODF, H(-) F(-)
NSB-3860	Cabinet 380x600x210, set [1], w/o Climate system, w/o ODF, H(-) F(-)
NSB-3040F1	Cabinet 300x400x210, set [1, 3], w/o Climate system, with ODF, H(-) F(+)
NSB-3838F1	Cabinet 380x380x210, set [1, 3], w/o Climate system, with ODF, H(-) F(+)
NSB-3860F1	Cabinet 380x600x210, set [1, 3], w/o Climate system, with ODF / 4FC, H(-) F(+)
NSB-3860F2	Cabinet 380x600x210, set [1, 3], w/o Climate system, with ODF / 8FC, H(-) F(+)
NSB-3040H1	Cabinet 300x400x210, set [1, 2], with Climate system, w/o ODF, H(+) F(-)
NSB-3838H1	Cabinet 380x380x210, set [1, 2], with Climate system, w/o ODF, H(+) F(-)
NSB-3860H1	Cabinet 380x600x210, set [1, 2], with Climate system, w/o ODF, H(+) F(-)
NSB-3040H1F1	Cabinet 300x400x210, set [1, 2, 3], with Climate system, with ODF, H(+) F(+)
NSB-3838H1F1	Cabinet 380x380x210, set [1, 2, 3], with Climate system, with ODF, H(+) F(+)
NSB-3860H1F1	Cabinet 380x600x210, set [1, 2, 3], with Climate system, with ODF, H(+) F(+)
NSB-3860H2F1	Cabinet 380x600x210, set [1, 2, 3, 4], with Climate system, with ODF, H(+) F(+)
NSB-3860H2F2	Cabinet 380x600x210, set [1, 2, 3, 4], with Climate system, with ODF / 8FC, H(+) F(+)

[1] **BASIC:** DIN Rails 2-3pcs; Cable glands PG-7/9/11/.../36; Circuit breaker 10A; Terminal blocks

[2] **CLIMATE:** Heater 45-75W/220VAC; Thermostats NC/NO; AC Fans 120x25mm/220VAC

[3] **FIBER:** ODF with 4/8 FC adapters, pigtails, patch cords

[4] **IZOLUX:** Thermal insulation of foamed polyethylene



**NSBox-UPS-xxx series of enclosures**  
with installed UPS at 12, 24, 48VDC; 220VAC

**NSBox-ICE-xxx series of enclosures**  
with installed Thermoelectric Coolers 100-400W

### Optional accessories NSBon-xx (Separate order)

		Mechanical Devices
NSBon-00	Rails for interior installation. MH-210 x 1	
NSBon-01	Pole Mount Kit for wall-mounted enclosures. Rittal	
NSBon-02 // NSBon-03	Rain canopies, stainless steel, 300x210mm // 380x210mm. Rittal	
NSBon-04	Plastic handle with lock cylinder insert, Lock no. 3524 E. Rittal	
		Electrical Devices
NSBon-05	Door-operated switch, with accessory for interior installation.	
NSBon-08	Socket for mounting on DIN Rails.	
NSBon-16	Sensor and supply voltage controller, Ethernet	
NSBon-36	Cold start system 240VAC/18A	
NSBon-49	Power converter. Input 48VDC - Output 12 VDC, terminal blocks 4 pcs.	
		Surge protection for power circuits and Ethernet ports
NSBon-09 // NSBon-10 // NSBon-11	Surge protection for high-voltage power circuits, 220VAC.	
NSBon-12 // NSBon-13	Surge protection for Ethernet ports, 10/100M + PoE, 1 port // 4 ports	
NSBon-14 // NSBon-15	Surge protection for Ethernet ports, 10/100/1000M + PoE, 1 port // 4 ports	
NSBon-17	Surge protection for low-voltage power circuits. OVP 40x2	
		Built-in 24VAC Power Systems for PTZ Network Cameras
NSBon-31 // NSBon-32 // NSBon-33	Toroidal transformer OCM T 220/24 -0.xx, 0.10kVA // 0.16kVA // 0.25kVA	
		Uninterruptible Power Supplies
	Uninterruptible Power Supply 48VDC-155VA, with batteries 4x 2.2Ah // 4x 7Ah	
	Uninterruptible Power Supply 48VDC-240VA, with batteries 4x 7Ah	
	Uninterruptible Power Supply 48VDC-360VA, with batteries 4x 7Ah	
	Uninterruptible Power Supply 48VDC-500VA, with batteries 4x 7Ah	
	Uninterruptible Power Supply 48VDC-240VA/220VAC-300VA, with batteries 4x 7Ah	
	Uninterruptible Power Supply 48VDC-500VA/220VAC-300VA, with batteries 4x 7Ah	
		Original Author's Products
NSBon-06	Indoor lighting kit for enclosure. NSBox Lighting	
NSBon-18	Compact Fan Heater for enclosure. NSBox Heating. 75W	
NSBon-19	Vandal-proof Filter Fan for enclosure. NSBox Venting.	
NSBon-37	Thermoelectric Coolers. Series Standard_DC, 24/48VDC. NSBox Cooling	
NSBon-38	Thermoelectric Coolers. Series Standard_AC, 220VAC. NSBox Cooling	

