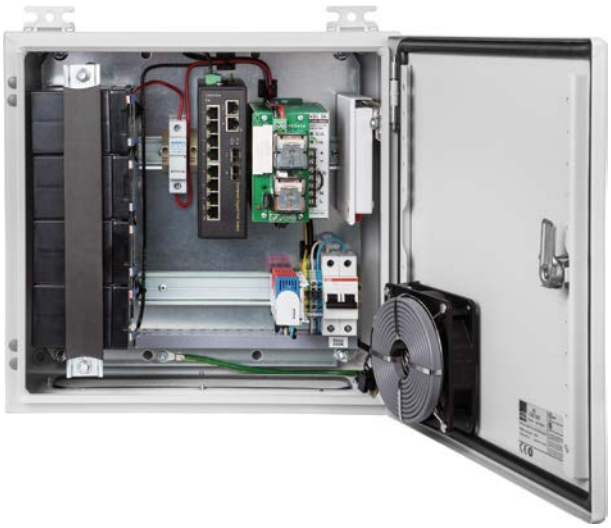
Outdoor Video Surveillance systems

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.

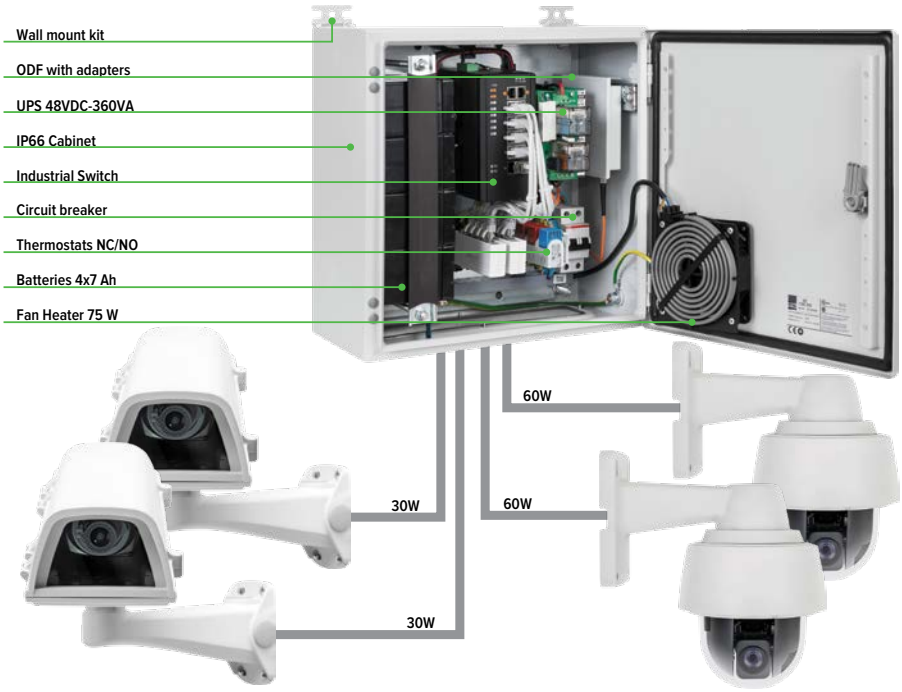
The NSBox access Nodes are devised for the organization of protected outdoor video surveillance systems. The access Node has equipment inside the enclosure that provides protection and reliable operation of the IP cameras and switching IP-video traffic to the processing and storage center via fiber optic 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 2-20 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-220	NSB-3030F1 enclosure, 48VDC-100W Power supply; Unmanaged switch: Uplink 2 Gigabit (SFP socket + TP), 2 ports 10/100/1000T PoE 30W for IP cameras
NSBox-310	NSB-3030F1 enclosure, 48VDC-100W Power supply; Unmanaged switch: Uplink 3 Gigabit (SFP socket + 2 TP), 1 port 10/100/1000T High-Power PoE 60W for IP cameras
	4 ports PoE
NSBox-245	NSB-3040F1 enclosure, 48VDC-150W Power supply; Unmanaged switch: Uplink 2 Gigabit (SFP + TP/SFP combo), 4 ports 10/100/1000T PoE 30W for IP cameras
NSBox-245R	NSB-3838F1 enclosure, 48VDC-155VA UPS (4x 2.2Ah); Unmanaged switch: Uplink 2 Gigabit (SFP + TP/SFP combo), 4 ports 10/100/1000T PoE 30W for IP cameras
NSBox-247	NSB-3040F1 enclosure, 48VDC-240W Power supply; Unmanaged switch: Uplink 2 SFP/1G, 4 ports 10/100/1000T PoE (2x 30W + 2x 60W High-Power PoE) for IP cameras
NSBox-247R	NSB-3838F1 enclosure, 48VDC-240VA UPS (4x 7Ah); Unmanaged switch: Uplink 2 SFP/1G, 4 ports 10/100/1000T PoE (2x 30W + 2x 60W High-Power PoE) for IP cameras
NSBox-248	NSB-3040F1 enclosure, 48VDC-360W Power supply; Unmanaged switch: Uplink 2 SFP/1G, 4 ports 10/100/1000T PoE (4x 60W High-Power PoE) for IP cameras
NSBox-248R	NSB-3838F1 enclosure, 48VDC-360VA UPS (4x 7Ah); Unmanaged switch: Uplink 2 SFP/1G, 4 ports 10/100/1000t PoE (4x 60W High-Power PoE) for IP cameras
NSBox-442	NSB-3838F1 enclosure, 55VDC-360W Power supply; Unmanaged switch: Gigabit Uplink 2 SFP + 2 TP, 4 ports 10/100/1000T PoE (2x 30W + 2x 95W Ultra PoE) for IP cameras
	8 ports PoE
NSBox-285	NSB-3040F1 enclosure, 48VDC-360W Power supply; Unmanaged switch: Uplink 2 Gigabit SFP/TP Combo, 8 ports 10/100/1000T PoE 30W for IP cameras
NSBox-285R	NSB-3838F1 enclosure, 48VDC-360VA UPS (4x 7Ah); Unmanaged switch: Uplink 2 Gigabit SFP/TP Combo, 8 ports 10/100/1000T PoE 30W for IP cameras
NSBox-286	NSB-3860F1 enclosure, 48VDC-360W Power supply; Unmanaged switch: Uplink 2 Gigabit SFP/TP Combo, 8 ports 10/100/1000T PoE 30W for IP cameras
NSBox-286R	NSB-3860F1 enclosure, 48VDC-360VA UPS (4x 7Ah); Unmanaged switch: Uplink 2 Gigabit SFP/TP Combo, 8 ports 10/100/1000T PoE 30W for IP cameras
	16 ports PoE
NSBox-360	NSB-3860F1 enclosure, 48VDC-500W Power supply; 2x Unmanaged switch: Uplink 2 Gigabit SFP/TP Combo, 16 ports 10/100/1000T PoE 30W for IP cameras
NSBox with Managed PoE Switches L2/L2+	**4 ports PoE**
NSBox-4042	NSB-3040F1 enclosure, 48VDC-150W Power supply; Managed switch: Gigabit Uplink 2 SFP + 2 TP, 4 ports 10/100/1000T PoE 30W for IP cameras; Reboot PDs
NSBox-4042R	NSB-3838F1 enclosure, 48VDC-155VA UPS (4x 7Ah); Managed switch: Gigabit Uplink 2 SFP + 2 TP, 4 ports 10/100/1000T PoE 30W for IP cameras; Reboot PDs
	8 ports PoE
NSBox-2080	NSB-3040F1 enclosure, 48VDC-360W Power supply; Managed switch: Uplink 2 SFP/1G, 8 ports 10/100T PoE 30W for IP cameras; Reboot PDs
NSBox-2080R	NSB-3838F1 enclosure, 48VDC-240VA UPS (4x 7Ah); Managed switch: Uplink 2 SFP/1G, 8 ports 10/100T PoE 30W for IP cameras, Reboot PDs
NSBox-4080	NSB-3838F1 enclosure, 48VDC-360W Power supply; Managed switch: Uplink 4 SFP/1G, 8 ports 10/100/1000T PoE 30W for IP cameras; Reboot PDs
NSBox-4080R	NSB-3838F1 enclosure, 48VDC-360VA UPS (4x 7Ah); Managed switch: Uplink 4 SFP/1G, 8 ports 10/100/1000T PoE 30W for IP cameras; Reboot PDs
NSBox-4081	NSB-3860F1 enclosure, 48VDC-360W Power supply; Managed switch: Uplink 4 SFP/1G, 8 ports 10/100/1000T PoE 30W for IP cameras; Reboot PDs
NSBox-4081R	NSB-3860F1 enclosure, 48VDC-360VA UPS (4x 7Ah); Managed switch: Uplink 4 SFP/1G, 8 ports 10/100/1000T PoE 30W for IP cameras; Reboot PDs
NSBox-4082	NSB-3838F1 enclosure, 48VDC-360W Power supply; Managed switch: Gigabit Uplink 2 SFP + 2 TP, 8 ports 10/100/1000T PoE (2x 60W + 6x 30W) for IP cameras; Reboot PDs
NSBox-4082R	NSB-3838F1 enclosure, 48VDC-360VA UPS (4x 7Ah); Managed switch: Gigabit Uplink 2 SFP + 2 TP, 8 ports 10/100/1000T PoE (2x 60W + 6x 30W) for IP cameras; Reboot PDs
	16 ports PoE
NSBox-4160	NSB-3838F1 enclosure, 55VDC-500W Power supply; Managed switch: Gigabit Uplink 2 SFP + 2 TP, 16 ports 10/100/1000T PoE 30W; PoE PD alive check
NSBox-xxxx H	It means this NSBox with Heating inside enclosure: Fan Heater 75W and Thermostats NC/NO
NSBox-XYYZ C E L N R V	R - installed UPS N - installed NVR L - installed 4G LTE Router C - installed Thermoelectric Cooler V - stainless steel enclosure E - explosion proof enclosure

Basic Kits of NSB-xxxx enclosures

NSB-3030	Cabinet 300x300x210, set [1], without Heating, without ODF
NSB-3040	Cabinet 300x400x210, set [1], without Heating, without ODF
NSB-3838	Cabinet 380x380x210, set [1], without Heating, without ODF
NSB-3860	Cabinet 380x600x210, set [1], without Heating, without ODF
NSB-3040F1	Cabinet 300x400x210, set [1, 3], without Heating, with ODF
NSB-3838F1	Cabinet 380x380x210, set [1, 3], without Heating, with ODF
NSB-3860F1	Cabinet 380x600x210, set [1, 3], without Heating, with ODF / 4FC
NSB-3860F2	Cabinet 380x600x210, set [1, 3], without Heating, with ODF / 8FC
NSB-3040H1	Cabinet 300x400x210, set [1, 2], with Heating, without ODF
NSB-3838H1	Cabinet 380x380x210, set [1, 2], with Heating, without ODF
NSB-3860H1	Cabinet 380x600x210, set [1, 2], with Heating, without ODF
NSB-3040H1F1	Cabinet 300x400x210, set [1, 2, 3], with Heating, with ODF
NSB-3838H1F1	Cabinet 380x380x210, set [1, 2, 3], with Heating, with ODF
NSB-3860H1F1	Cabinet 380x600x210, set [1, 2, 3], with Heating, with ODF
NSB-3860H2F1	Cabinet 380x600x210, set [1, 2, 3, 4], with Heating, with ODF
NSB-3860H2F2	Cabinet 380x600x210, set [1, 2, 3, 4], with Heating, with ODF / 8FC
NSB-3838C1	Cabinet 380x380x210, set [1, 4, 5], without Heating, without ODF, with Cooler TC-100-DC: Cover_DC_S0_100W
NSB-3838C2	Cabinet 380x380x210, set [1, 4, 5], without Heating, without ODF, with Cooler TC-100-AC: Cover_AC_S0_100W
NSB-3860C3	Cabinet 380x600x210, set [1, 4, 5], without Heating, without ODF, with Cooler FR-208-C: Standard_DC_S2_200W
NSB-3860C4	Cabinet 380x600x210, set [1, 4, 5], without Heating, without ODF, with Cooler FR-208-AC: Standard_AC_S2_200W

[1] **BASIC**: DIN Rails 2-3pcs; Cable glands PG-7/9/11/.../36; Circuit breaker 10A; Terminal blocks
[2] **HEATING:** Fan Heater 75W 220 or 115VAC; Thermostats NC/NO
[3] **FIBER:** ODF with 4/8 FC adapters, pigtails, patch cords. F1= 4 FC adapters, F2= 8 FC adapters
[4] **IZOLUX**: Thermal insulation of foamed polyethylene
[5] **COOLING:** Thermoelectric Cooler. C1= TC-100-DC, C2= TC-100-AC, C3= FR-208-C, C4= FR-208-AC






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
NSBon-02 // NSBon-03	Rain canopies, stainless steel, 300x210mm // 380x210mm
NSBon-04	Plastic handle with lock cylinder insert, Lock no. 3524 E
	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-44	Mini NVR: 1 10/100/1000T, 4 10/100T PoE, 2 USB, HDMI, 9-Ch Input, 10Tb, 48VDC
NSBon-45	Mini NVR: 1 10/100/1000T, 2 USB, HDMI, 9-Ch Input, 2 2Tb, 12VDC
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. NSBox Lightning
NSBon-14 // NSBon-15	Surge protection for Ethernet ports, 10/100/1000M + PoE, 1 port // 4 ports. NSBox Lightning
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 // 360VA // 500VA, with batteries 4x 7Ah
	Uninterruptible Power Supply 220VAC-300VA/48VDC-240VA // 48VDC-500VA, 4x 7Ah
	Original Author's Products
NSBon-06 // -06-1 // -06-1	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 // NSBon-38	Thermoelectric Coolers. Series Standard. DC, 24/48VDC // AC, 220VAC. NSBox Cooling
NSBon-39 // NSBon-40	Thermoelectric Coolers. Series Cover. DC, 24/48VDC // AC, 220VAC. NSBox Cooling