

> Autonomous applications > IP66 protection for harsh environments > Renewable energy powered



Renewable energy sources like solar and wind are ideal for powering equipment in remote locations. These types of off-grid systems are commonly used to power equipment for a variety of different industrial applications. Common applications include lighting, wireless surveillance cameras, sensors, environmental monitors, traffic signals, oil/gas pipes network, pump stations, telecommunication equipment, and anything else that requires reliable power in a remote location.

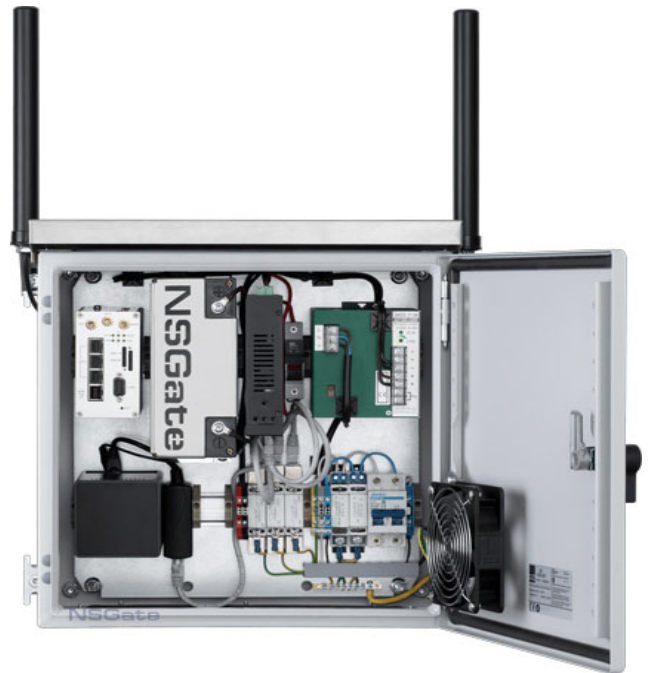
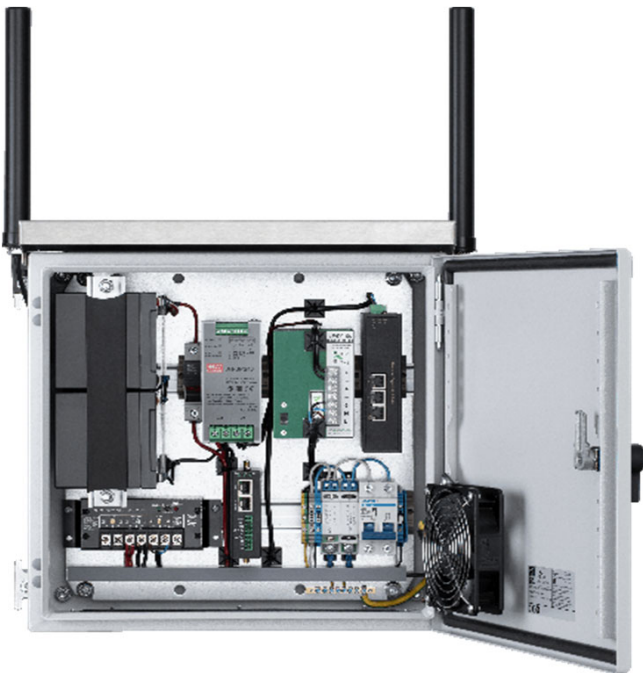
NSBox-SUN Outdoor Access Node is used to deploy protected autonomous or semi-autonomous outdoor applications in the area with no 24/7 electricity available and solar panels can be installed. Typical application for NSBox-SUN is wireless surveillance system that is powered from street lighting where AC power is available only at the night time. NSBox-SUN can be even used if there is no AC power at all if PDs connected to it have low power consumption that can be filled up with energy the sun provides during the day time.

Off-grid Solar Systems work by generating electricity from solar panels and using it to charge a solar battery via a charger controller. NSBox-SUN contains a charger controller that supports 18-40V panels up to 350W and embedded batteries controller that maintains the proper charge of the battery to prevent overcharging and deep discharge. It can be equipped with 24V battery up to 200 Ah and can use 220 VAC power or a solar panel as a power source. NSBox-SUN consists of the Industrial switch with embedded battery and charger controller and a 24VDC-240W power supply installed into electrical enclosures with protection category IP66 / NEMA4. Depending on the field of application and operating conditions, various series of electrical enclosures are offered: powder-coated sheet steel, stainless steel, glass reinforced polyester.

NSBox-SUN provides connection IP video cameras or other PoE PD devices using wireless uplink 4G | LTE | Wi-Fi and can provide PoE to different types of PDs including 30W PoE and passive 24V PoE.

Technical Data

Input Power: 18V solar panel 100-240VAC	Uplink: 4G LTE Wi-Fi fiber optic
Battery: 24V/50-200Ah (Lead Acid/Lithium)	Operating Temp.: -40°C to +60°C
Solar Panel: 18-40V Up to 350W	Dimensions: depends on the model
PoE: 802.3at 802.3bt Passive 24V	Weight: Up to 20 kg
PoE Budget: up to 120 W	Protection category: IP66 / NEMA4



NSBox-124R SUN-30 SX44W38F	Access Node: NSB-3838 enclosure with Fan, without Heater, without ODF; UPS DR-24VDC-240VA with mounting kit for batteries 15Ah x2; NIS-3200-115PSG Switch, NSBon-48 Booster; NSBon-51 Solar charge controller
NSBox-124R SUN-90 SX44W36F	Access Node: NSB-3860H2 enclosure with Fan, without Heater, without ODF; UPS DR-24VDC-240VA with mounting kit for batteries 45Ah x2; NIS-3200-115PSG Switch, NSBon-48 Booster; NSBon-51 Solar charge controller