

Solar Power Ethernet Kit for Remote Locations 30 Watts Continuous Power System with 3 Hours of Peak Sunlight

NWKSP4







BATTERIES

RIES 803.2at



The NetWave® NWKSP4 Solar off the grid power system is designed for applications where a remote camera or wireless repeater is needed but power is not available or the cost to run power is too expensive. NetWave Solar is a complete system for providing remote power to edge communications equipment. The kit includes a high quality photovoltaic solar panels, valve-regulated lead-acid batteries (NA only), outdoor enclosure, solar charge controller, PoE midspan injector and mounting hardware. The steel outdoor enclosure has a gasket hinged lid with two tamper proof locks operated by a special key for high security. The enclosure can be mounted on a two to four inch pole or wall mounted with the included mounting hardware. The Solar Panels include a top of pole mount requiring a 4" diameter pole. A side of pole mount is available as an optional accessory. The included 30A solar charge controller supports an LCD screen for local diagnostics and system health monitoring, Intelligent PWM charging mode and battery protection from overcharge and over discharge while the batteries provide outstanding deep cycle and cold weather performance.

FEATURES

- > Warranty: 1 Year on Batteries 2 Years on Solar Panels and Hardware
- Solar panels are designed with heavy duty anodized frames that are capable of withstanding high wind pressure, hail and snow load.
- > Solar Panels feature outstanding low light performance
- > Four High Efficiency Multicrystalline Photovoltaic Solar Panels
- Weatherproof powder coated steel enclosure that meets NEMA 4X/IP65 weatherproofing standards
- > Valve Regulated Sealed Lead Acid AGM Battery with great low temperature performance to -40°C (Available in NA only)
- > 24 VDC Solar Charge Controller with LCD Screen, Intelligent PWM Charging Mode, Adjustable charging and discharging parameters
- > 56 VDC Gigabit PoE+ Injector

- > Intelligent Controller Featuring:
- Solar Controller Diagnostics LCD Display Supporting Readout of Several Parameters Including System Charge/ Discharge and Battery Voltage
- Ampere Hours Monitoring of Accumulated Charge/ Discharge
- Intelligent PWM Charge Controller
- Automatic Temperature Compensation
- Adjustable Charge/Discharge Control Parameters
- Battery Low Voltage Disconnection
- Battery Reverse Connection Protection
- Overload/Short Circuit Protection

APPLICATIONS

- > Remote Surveillance Cameras
- > Wireless Perimeter Surveillance
- > Temporary Network Surveillance Deployments
- > Construction Site Network Access

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SPECIFICATIONS

Controller

Controller Type 12 -24 V Solar Charge Controller

Controller Self Consumption < 0.5 W

IEEE 802.3at Compliant Power Injector

24 VDC Input

Output 56 VDC @ .625 A **Self Consumption** 1 W

Solar Panels (QTY 4)

Maximum Power (Pmax) 120 W Voltage at Pmax (Vmp) 17.2 V 6.98 A Current at Pmax (Imp) Open-circuit voltage (Voc) 21.6 V Short-circuit current (Isc)

Temperature coefficient of Voc -(80±10)mV/°C Temperature coefficient of Isc -(0.065±0.015)%/°C Temperature coefficient of power -(0.5±0.05)%/°C

NOCT1 47±2°C Operating temperature -40°C to +85°C 1000 VDC Maximum system voltage Power tolerance ±5%





Peak Sunlight	3 Hours	
Battery Capacity	110 Ah	
Battery Voltage	24 V	
Reserve Time	40 Hours ²	
PoE Output Voltage	56 VDC	
System Weight with Batteries ³	410 lb (186 kg)	

Mechanical

Enclosure **Powder Coated Steel**

Enclosure Size $24 \times 15 \times 14$ in $(60.96 \times 38.1 \times 35.56$ cm)

Solar Panels 4 × 120 W Solar Panels

Solar Panel Size $48.98 \times 26.57 \times 1.38$ in $(124.4 \times 67.5 \times 3.5$ cm)

Solar Panel Weight 24.25 lb / 11 kg

Environmental

MTBF >100,000 hours -30° C to +60° C **Operating Temp** Storage Temp -40° C to +85° C 5% to 95% **Relative Humidity**

Warranty

Batteries 1 Year Solar Panels & Hardware 2 Years

[1] Nominal Operating Cell Temperature: Air 20°C; Sun 0.8kW/m²;

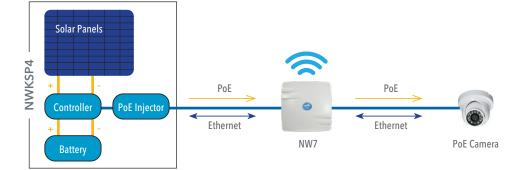
Wind 1m/s

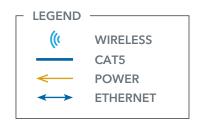
[2] Actual Reserve Time is condition-dependent.

ORDERING INFORMATION

Part Number	Description
NWKSP4	30W continuous power solution requiring 3 hours of peak sun a day. Option only available in North America.
NWKSP4/NB	30W continuous power solution requiring 3 hours of peak sun a day. No Battery. Option not available in North America.
Included Accessories	Enclosure, Top of Pole mounting hardware for the Solar Panel, Controller, Midspan Injector and Cables
Options	User selection of Industrially Hardened NetWave® Wireless Ethernet Units

TYPICAL APPLICATION





3 CORPORATE DRIVE | DANBURY, CONNECTICUT 06810 | USA | T: 203.796.5300 | F: 203.796.5303 | TECH SUPPORT: 1.888.678.9427 | INFO@COMNET.NET SUITE 7, CASTLEGATE BUSINESS PARK | CALDICOT | SOUTH WALES, UK NP26 5AD | T: +44(0) 2036 300 695 | F: +44(0)113 253 7462 | INFO-EUROPE@COMNET.NET





Low Power Consumption