NPOD
ENERGY STORAGE SYSTEM

NPOD ESS

Energy Storage & Online UPS Solutions

Five models from 1 kVA to 10 kVA, one platform.



INTRODUCTION

Power that keeps your business running

Disruptions in power can stall operations,stress critical infrastructure and raise

operating costs. As demand grows from automation, AI
and critical IT systems, ageing backup systems struggle to keep pace.
NPOD ESS brings power protection, battery storage and monitoring into one platform that is simpler to install, manage and grow. Choose from five models, from a compact 1 kVA wall-mount unit to a 10 kVA system for higher-demand critical loads.

5	110–300	0 ms	ISO
models, 1 – 10 kVA			certified quality

Why a unified power platform

Online UPS protection
Immediate power during interruptions and protection from voltage fluctuations.

Lithium & lead-acid options
Flexible battery choice, with LiFePO4 for longer life and lower maintenance.

Energy storage ready
Store energy for later use to reduce peak demand and back up critical loads.

Monitoring built in
LCD display plus RS232 / RS485 / SNMP / dry contact for easy integration.



QUALITY & CERTIFICATIONS

ISO 9001:2015 ISO 14001:2015 ISO 45001:2018 ISO 27001:2018

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FEATURES

Built for reliable power

Every NPOD ESS model shares the same core design.

1

Online double conversion

Continuous online protection for critical equipment.

2

Wide input range

Operates across 110 – 300 V AC input.

3

Zero transfer time

Power continues without interruption when the mains fails.

4

LCD monitoring

Clear system status on the integrated LCD display.

5

Open communication

RS232 / RS485 / SNMP / dry contact interfaces.

6

Flexible batteries

Lead acid, with optional LiFePO4 lithium battery.

The 1 kVA model uses an LFP lithium-ion battery and RS232 / USB communication. See its data sheet on page 6.

Compare the range

Key differences between the five NPOD ESS models.



Specifications	1 kVA	2 kVA	3 kVA	6 kVA	10 kVA
Capacity	1000 VA / 800 W	2000 VA / 2000 W	3000 VA / 3000 W	6000 VA / 6000 W	10000 VA / 10000 W
Power Factor	≥ 0.99	1	1	1	1
Efficiency	Up to 94% (99% ECO)	Up to 96% (ECO)	Up to 96% (ECO)	Up to 96% (ECO)	Up to 96% (ECO)
Battery	LFP lithium-ion, 36 V DC	Lead acid / LiFePO4 (optional)	Lead acid / LiFePO4 (optional)	Lead acid / LiFePO4 (optional)	Lead acid / LiFePO4 (optional)
Communication	RS232, USB	RS232 / RS485 / SNMP / dry contact	RS232 / RS485 / SNMP / dry contact	RS232 / RS485 / SNMP / dry contact	RS232 / RS485 / SNMP / dry contact
Dimensions W × D × H (mm)	400 × 160 × 650	220 × 420 × 450	230 × 450 × 550	250 × 650 × 1100	On request
Weight	25 kg	22 kg*	29 kg*	85 kg*	On request

* Weight without battery. The 1 kVA figures are from its own data sheet and may be listed differently elsewhere.

Common to all models

Technology
Online double conversion

Input voltage range
110 – 300 V AC

Output voltage regulation
± 1%

Output frequency
50 / 60 Hz

Transfer time
Zero

Display
LCD

ESS 1kVA

Reliable Online UPS Power Protection Solution



A compact, wall-mountable power protection unit with lithium-ion battery, delivering clean, stable and uninterrupted power for critical equipment.

Key features

- Li-ion battery (LFP), plug & play wall-mount
- design Full LCD with LED indications
- High efficiency: 94% on-line, 99% ECO mode
- Pure sine wave output, safe for sensitive
- devices Fast charging: 80% within 2 hours
- Wide input voltage range: 110 V – 300 V AC
- Compact footprint, DG compatible

Technical specifications

GENERAL

Model	**ENL1101B**
Capacity (kVA / kW)	**1.0 / 0.8**

INPUT

Nominal voltage	**230 V AC (1Ph+N+PE, 3 wire)**
Operating voltage	**1.0 / 0.8**
Range Operating	**ENL1101B**
Frequency Power	**1.0 / 0.8**
factor	**ENL1101B**

OUTPUT

Output voltage	**230 V ± 1%**
Output frequency	**50 / 60 Hz ± 0.1 Hz (battery mode)**
Harmonic distortion	**< 3% linear, < 5% non-linear**
(THDv) Crest factor	**3:1**
Efficiency	**Up to 94% dual conversion, 99% ECO mode**

BATTERY

DC voltage	**36 V DC**
Chemistry	**LFP**
Back-up time	**110 – 120 min on connected**
Battery operating temperature	**load 0 ~ 50 °C**

SYSTEM FEATURES

LCD indication	**Input / output voltage & frequency, battery voltage, load W/VA/%, inverter temperature, mode, fault codes, battery & load.**
LED indication	**bar graph Normal, bypass, abnormal, fault, battery mode**
Alarms / protection	**Battery low, DC high, inverter under/over voltage, overload, short circuit, fan failure, UPS fault**
Overload capability	**105 – 150% for 10 s, > 150% for 5 s AC to battery 0 ms**
Transfer time	**inverter to bypass 4 ms (typical)**

ENVIRONMENTAL

Temperature	**Operating 0 ~ 50 °C, storage −10 ~ 55 °C**
Humidity / altitude	**0 ~ 95% RH non-condensing / < 1500 m**
Noise	**< 45 dBA**

STANDARDS

Quality	**ISO 9001, 14001, 27001, 45001, 50001, RoHS**
Safety / EMC / performance	**IEC/EN 62040-1, -2, -3; CE**

PHYSICAL & COMMUNICATION

Dimensions W × D × H	**00 × 160 × 650 mm**
Weight	**25 kg**
Communication	**RS232, USB**

ESS 2 kVA

Reliable Online UPS Power Protection Solution



Stable, clean and uninterrupted power protection for critical equipment, with online double conversion and flexible battery configuration.

Key features

- Online double conversion technology
- High efficiency operation
- Wide input voltage range: 110 – 300 VAC
- Stable and clean output power
- Power factor of 1.0, zero transfer time
- LCD display for system monitoring
- Lead acid / LiFePO4 (optional) battery
- RS232 / RS485 / SNMP / dry contact
- communication Compact and space-efficient

Technical specifications

POWER & TECHNOLOGY

Capacity	**2000 VA / 2000 W**
Technology	**Online double conversion**

INPUT

Input voltage	**208 / 220 / 230 / 240 VAC**
Input voltage range	**110 – 300 VAC (phase to neutral)**
Input frequency	**40 – 70 Hz**

OUTPUT

Output voltage	**208 / 220 / 230 / 240 VAC**
Output voltage regulation	**± 1%**
Output frequency	**50 / 60 Hz ± 0.1%**
Power factor	**1.0**
THD	**≤ 2% (linear load)**

PERFORMANCE & MONITORING

Efficiency	**Up to 96% (ECO mode)**
Transfer time	**Zero transfer time**
Display	**LCD display**
Communication	**RS232 / RS485 / SNMP / dry contact**

BATTERY

Battery type	**Lead acid / LiFePO4 (optional)**
Backup time (full load)	**Depends on battery capacity**

PHYSICAL

Dimensions (W × D × H)	**220 × 420 × 450 mm**
Weight (without battery)	**22 kg (approx.)**

ESS 3 kVA

Scalable Energy Storage & Online UPS Solution



Dependable backup power and continuous protection for critical equipment, with a scalable battery configuration as power requirements grow.

Key features

- Online double conversion technology
- High efficiency operation
- Wide input voltage range: 110 – 300 VAC
- Stable and clean output power
- Power factor of 1.0, zero transfer time
- LCD display for system monitoring
- Lead acid / LiFePO4 (optional) battery
- RS232 / RS485 / SNMP / dry contact communication
- Higher-capacity solution for critical loads

Technical specifications

POWER & TECHNOLOGY

Capacity	**3000 VA / 3000 W**
Technology	**Online double conversion**

INPUT

Input voltage	**208 / 220 / 230 / 240 VAC**
Input voltage range	**110 – 300 VAC (phase to neutral)**
Input frequency	**40 – 70 Hz**

OUTPUT

Output voltage	**208 / 220 / 230 / 240 VAC**
Output voltage regulation	**± 1%**
Output frequency	**50 / 60 Hz ± 0.1%**
Power factor	**1.0**
THD	**≤ 2% (linear load)**

PERFORMANCE & MONITORING

Efficiency	**Up to 96% (ECO mode)**
Transfer time	**Zero transfer time**
Display	**LCD display**
Communication	**RS232 / RS485 / SNMP / dry contact**

BATTERY

Battery type	**Lead acid / LiFePO4 (optional)**
Backup time (full load)	**Depends on battery capacity**

PHYSICAL

Dimensions (W × D × H)	**230 × 450 × 550 mm**
Weight (without battery)	**29 kg (approx.)**

ESS 6 kVA

High-Capacity Energy Storage & Online UPS Solution



Power protection and energy storage for higher-demand critical applications, with efficient energy management and flexible battery options.

Key features

- Online double conversion technology
- High efficiency operation
- Wide input voltage range: 110 – 300 VAC
- Stable and clean output power
- Power factor of 1.0, zero transfer time
- LCD display for system monitoring
- Lead acid / LiFePO4 (optional) battery
- RS232 / RS485 / SNMP / dry contact communication
- High-capacity solution for critical loads

Technical specifications

POWER & TECHNOLOGY

Capacity	**6000 VA / 6000 W**
Technology	**Online double conversion**

INPUT

Input voltage	**208 / 220 / 230 / 240 VAC**
Input voltage range	**110 – 300 VAC (phase to neutral)**
Input frequency	**40 – 70 Hz**

OUTPUT

Output voltage	**208 / 220 / 230 / 240 VAC**
Output voltage regulation	**± 1%**
Output frequency	**50 / 60 Hz ± 0.1%**
Power factor	**1.0**
THD	**≤ 2% (linear load)**

PERFORMANCE & MONITORING

Efficiency	**Up to 96% (ECO mode)**
Transfer time	**Zero transfer time**
Display	**LCD display**
Communication	**RS232 / RS485 / SNMP / dry contact**

BATTERY

Battery type	**Lead acid / LiFePO4 (optional)**
Backup time (full load)	**Depends on battery capacity**

PHYSICAL

Dimensions (W × D × H)	**250 × 650 × 1100 mm**
Weight (without battery)	**85 kg (approx.)**

ESS 10 kVA

High-Capacity Energy Storage & Online UPS Solution



Power protection and energy storage for higher-demand critical applications, with efficient energy management and flexible battery options.

Key features

- Online double conversion technology
- High efficiency operation
- Wide input voltage range: 110 – 300 VAC
- Stable and clean output power
- Power factor of 1.0, zero transfer time
- LCD display for system monitoring
- Lead acid / LiFePO4 (optional) battery
- RS232 / RS485 / SNMP / dry contact communication
- High-capacity solution for critical loads

Technical specifications

POWER & TECHNOLOGY

Capacity	**10000 VA / 10000 W**
Technology	**Online double conversion**

INPUT

Input voltage	**208 / 220 / 230 / 240 VAC**
Input voltage range	**110 – 300 VAC (phase to neutral)**
Input frequency	**40 – 70 Hz**

OUTPUT

Output voltage	**208 / 220 / 230 / 240 VAC**
Output voltage regulation	**± 1%**
Output frequency	**50 / 60 Hz ± 0.1%**
Power factor	**1.0**
THD	**≤ 2% (linear load)**

PERFORMANCE & MONITORING

Efficiency	**Up to 96% (ECO mode)**
Transfer time	**Zero transfer time**
Display	**LCD display**
Communication	**RS232 / RS485 / SNMP / dry contact**

BATTERY

Battery type	**Lead acid / LiFePO4 (optional)**
Backup time (full load)	**Depends on battery capacity**

PHYSICAL

Dimensions (W × D × H)	**On request**
Weight (without battery)	**On request**

Dimensions and weight for the 10 kVA configuration are available on request.

APPLICATIONS

Built for every mission-critical environment

NPOD **ESS supports** businesses across a wide range of industries.

- Data centers
- Manufacturing
- Telecom
- Government
- Banking & financial services
- Healthcare
- Smart cities
- Education
- Industrial automation
- Retail



How it works

1 Utility
Mainspower feeds the system

2 UPS
Onlinedouble conversion protects the load

3 Battery
Storedenergy takes over instantly

4 Load
Criticalequipment keeps running

NPOD™
ENERGY STORAGE SYSTEM

Let's design your power infrastructure.

Talk to our energy experts for a free consultation. We assess your infrastructure and recommend a scalable solution.

ADDRESS

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CERTIFICATIONS

ISO 9001:2015
ISO 14001:2015
ISO 45001:2018
ISO 27001:2018