



6 - 10 kVA

## NETZ+

Netz / Netz+ series is the new generation of small power UPS by EnerTech, both input and output are single phase and output power factor is 1.0. The efficiency of this UPS is very high, it can achieve considerable power saving and reduce total cost of ownership in result.



### GENERAL SPECIFICATIONS

- N+X parallel redundancy
- Online double conversion with DSP control
- Input current harmonic: <3%
- Optimization battery group, the quantity of battery: 16/18/20 pieces (optional)
- High output power factor at 1.0
- Wide input voltage range: 120-276Vac
- Wide input frequency range
- Support generator input
- ECO mode operation for energy saving
- Self-testing when UPS startup
- Options: SNMP card / Relay card / Parallel card
- Cold Start





## **ABSOLUTE PROTECTION**

The UPS systems of the Netz / Netz+ series guarantee highest protection and highest quality of care for all kinds of applications, especially mission-critical applications such as security systems and electro medical devices, and Industrial and telecommunication processes as well.

Netz / Netz+ is an uninterruptible double converter online system of class VFI SS 111 according to IEC (EN-62040-3). The power range of Netz / Netz+ is from 1kVA to 10kVA.

## **EASY SOURCE**

Netz / Netz+ increases efficiency and simplifies supply of the UPS by power generators.

In addition, the losses in the system and in the windings, and the corrected power factor and eliminated harmonics, which are also generated by loads and the UPS itself, has been reduced in this series.

## **POWER CONTINUITY**

Enertech has been developing for many years, several solutions to meet different requirements and solve problems in the field critical applications there.

Enertech offers adaptable High level solutions of availability, which is different plant structures and the different security levels to adjust.

Enertech produces resilient UPS systems that are capable to solve a variety of faults in components and systems compensate without any interrupt to the continuous supply of the consumer.

This is accomplished by installing redundant elements and through careful planning to remedy the general points of failure, to carry out planned maintenance and monitoring the operating and environmental parameters. The employees of the technical services are ready to give you advice and provide solutions for your projects.

## **FLEXIBILITY**

Netz / Netz+ series is suitable for every type of application, from IT to medical units, and industrial conditions. Thanks to the large selection of options, complex systems can be implemented that ensure maximum availability of particularly critical consumers.



## **BATTERY PROTECTION SYSTEM (BPS):**

Maximum protection of the batteries is normally achieved by the rectifier; in the event of a power failure, the UPS uses this energy source to supply its own consumers. An effective battery management system is therefore essential to ensure the desired protection in an emergency.

## **EASY INSTALLATION**

Very little space is required to install Netz / Netz+. In addition, installing internal serials does not require any specialization and electrical acknowledgment, just plug in, and use the UPS backward outlets.

## **SPECIAL SOLUTIONS**

The UPS can be adapted to the specific requirements of the application. Contact our technicians, for specifications and special solutions that are not listed in the catalog.

## **ADVANCED COMMUNICATION**

- Compatible with SNMP for remote monitoring.
- Advanced communication, multi-platform for all operating systems and network environments. Monitoring and shutdown through Power-Shield software is included, with SNMP protocol, for operating systems Windows 2008, Vista, 2003, XP, Linux, Mac OS X, Sun Solaris Linux, and other systems.
- The UPS is equipped with a cable for direct connection to a PC (plug and play)
- Double serial interface RS232
- Also there is a USB connection port for using with monitoring systems which do not have RS232 ports.

## **OPTIONS**

- Emergency Power Off (EPO)
- SNMP card for monitoring system
- Relay Card



## TECHNICAL SPECIFICATIONS

| MODEL                      | 6kVA L   | 10kVA L        |
|----------------------------|--|----------------|
| Capacity (VA/Watts)        | 6000VA/6000W   | 10000VA/10000W |
| INPUT                      |  |                |
| Nominal Voltage            | 220/230/240Vac   |                |
| Operating Voltage Range    | 120 ~ 276Vac   |                |
| Frequency Range            | 50HZ:45 ~ 55Hz; 60Hz:54~66Hz (auto sensing)  |                |
| Power Factor               | ≥0.99  |                |
| Bypass voltage range       | Max voltage: 220v: +25% (optional+10% +15% +20%)<br>230v: 020% (optional +10% +15%)<br>240v: +15% (optional+10%)<br>Min voltage: -45% (optional-20%-30%) |                |
| Bypass frequency range     | frequency protection range: ±10%   |                |
| ECO range                  | same as the bypass   |                |
| Harmonic distortion (THDi) | <3% (100% linear load)   |                |
| Generator input            | Support  |                |
| OUTPUT                     |  |                |
| Output voltage             | 220/230/240Vac   |                |
| Power Factor               | 1  |                |
| Voltage Regulation         | ±1%  |                |
| Frequency                  | 50/60(±0.1) Hz   |                |
| Crest Factor               | 3:1  |                |
| Harmonic Distortion (THDv) | ≤2% with linear load / ≤5% with non-linear load  |                |
| Efficiency                 | >93%   |                |
| BATTERY                    |  |                |
| Battery voltage            | ±96/108/120Vdc (optional)  |                |
| Typical recharging time    | 6-8 hours (to 90% of full capacity)  |                |
| Charging current           | Max current 10A (Charging current can be set according to battery capacity installed)  |                |
| SYSTEM FEATURES            |  |                |
| Transfer time              | Main to battery: 0ms; Mains to bypass: 0ms   |                |
| Overload                   | load≤110%: last 10min ≤130%: last 1min >130% turn to bypass mode immediately   |                |
| Short circuit              | Hold whole system  |                |
| Overheat                   | line mode: turn to Bypass; / Bat Mode: shut down UPS immediately   |                |
| Battery low                | Alarm and switch off   |                |
| Self-diagnostics           | upon power on and software control   |                |
| Battery                    | Advanced battery management  |                |
| Audible & Visual alarms    | line failure, Battery low, Overload, System fault  |                |
| LED & LCD display          | line mode, Bat mode, Eco mode, Bypass mode, Battery under voltage, overload & UPS fault  |                |
| LCD display                | input voltage, input frequency, output voltage, output frequency, load percentage, Battery voltage, Inner temperature & Remaining Battery backup time    |                |
| Communication interface    | RS232,USB,SNMP card (optional), parallel card (optional), Relay card (optional)  |                |
| ENVIRONMENT                |  |                |
| Operating temperature      | 0°c ~ 40°c   |                |
| Storage temperature        | -25°c ~ 55°c   |                |
| Humidity range             | 0~95% (non-condensing)   |                |
| Altitude                   | < 1500m  |                |
| Noise level                | < 55dB   |                |
| PHYSICAL                   |  |                |
| Dimension W×D×H (mm)       | Standard model: 191*460*720 ; long run model: 191*405*330  |                |
| Net weight (kg)            | 13   | 15             |
| STANDARD                   |  |                |
| Safety                     | IEC/EN62040-1 , IEC/EN60950-1  |                |
| EMC                        | IEC/EN62040-2 , IEC61000-4-2 , IEC61000-4-3 , IEC61000-4-4<br>IEC61000-4-5 . IEC61000-4-6 . IEC61000-4-8   |                |