

UNINTERRUPTIBLE POWER SUPPLY

by knürr

Blackout.



knürr
environments for electronics



Blackout?

A horror scenario for anyone who is responsible for the operational reliability of electronic equipment. If you haven't taken the appropriate precautions, you'll be left holding the baby!

In recent years we have seen one incredible report after the other. The media had a field day with the coverage of the numerous power cuts. 50 million people were left standing in the dark in the USA. Sweden, Denmark, Italy and Germany followed. The causes of these blackouts are still partially unclear!

Hand on heart ... could you realistically afford a failure of your active network components or servers?

How well prepared are you for power cuts?

Extract from the "Blackout List"

North America/Canada

18 January 2001 San Francisco
14 August 2003 North East/Canada

France

26 December 1999 Paris department

Sweden/Denmark

23 September 2003 Country-wide
9 January 2005 South Sweden
26 July 2006 Forsmark NPP

Italy/Switzerland

28 September 2003 Country-wide/Geneva
23 June 2005 Swiss National Rail

Austria

7 October 2003 Vienna

Russia

25 May 2005 Moscow

Greece

11 July 2004 Athens

Germany

11 June 2003 ICE FFM stretch
13 August 2003 Berlin University
19 August 2003 Hamburg, Mittelweg
21 October 2003 Mannheim, city dist.
6 August 2004 Weserstadion, Bremen
25 November 2005 Westfalen
28 March 2006 Hamburg/Harburg
4 November 2006 Western Germany

Plus! Columbia, Argentina, Algeria, Nigeria, India, the Philippines, etc.



Against the Current

Independent power supplies to combat grid faults and interruptions

Irritating error messages, crashes and temporary data losses not only profoundly endanger data security, they also disrupt the sensitive process flows within a company. More than a third of these system problems are related to power supply deficiencies.

Voltage peaks, pulse faults, under and overvoltages, power failures, lightning strikes, frequency deviations and frequency grids, but for the most part asymmetric discharges and faults (pulses up to several kV) are among the proven culprits. The overall damages are very significant and can be of critical importance for surviving in business.

Only one of the uninterruptible power supplies (UPS) that corresponds with the respective level of protection can prevent the loss of or damage to data.

A UPS consequently not only prevents the voltage drop, but rather also cleans the input voltage for a clean sinus curve.

For every conceivable purpose, every IT system and every environment, Knürr provides the correspondingly efficient UPS from Liebert in order to comply with the level of safety/security and therefore the Emerson Network Power principle:

“Business-Critical Continuity”

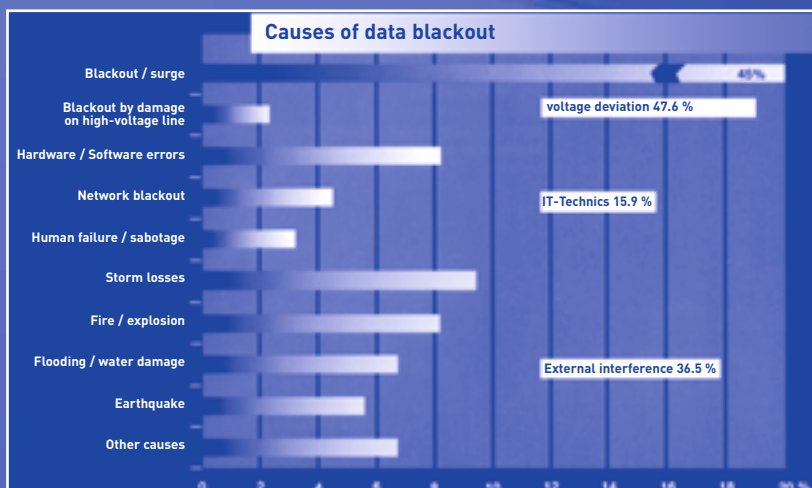
Uninterruptible Power Supplies

Strong points

- **Safety**
High-grade online and line interactive technologies guarantee the secure and uninterruptible operation of your systems.
- **Efficiency**
The 19" modules provide high performance on very little installation space with compact construction and modular setup.
- **Investment security**
Our solutions grow with your requirements, can be flexibly used and are easily expanded.
- **Central UPS systems**
Higher power classes 10 kVA to 800 kVA with installation and maintenance on request.
- **Modularity**
The individual components of this range can be combined according to requirements and consequently produce .
- **User-friendliness**
An extensive range of displays and interactive interfaces for external evaluation of status messages provide the user with up-to-date system information at all times.
- **Highest possible protection**
Online UPS systems provide the highest possible protection against the 10 most frequent mains faults.

If however...

you are still of the opinion that you can do without Knürr UPS technology forever despite this argument, then we'll give you a little "help for self-help", just by way of precaution.



Wide-Ranging Protection – The Easiest Administration

PowerSure PSI

Protection in rack and tower use for networks, telecommunications and servers. Effective, high-performance and ideal for protecting critical components.

- Line-interactive technology with sinus wave output
- Up to 9 UPS outputs backed-up by batteries
- External battery-extension modules (optional)
- Communication via USB, RS232 and SNMP port
- Efficient early warning system
- Up to 26 minutes bridging time with built-in batteries
- Configurable input voltage range (220, 230 and 240V)
- Data protection line (overvoltage protection)
- Hot-swap batteries, for user-friendly battery change
- BlackStart via battery without input voltage
- Remote UPS monitoring via SNMP/WEB adapter



GXT2 1000 – 6000 VA

True Online Power - full energy for your company. Individually configurable high-performance UPS, reliable and equipped with hot-swap batteries for extendable autonomy time in a compact construction (rack and tower design). Ideal for server and data centres, complex networks and telecom systems that all require quality power

- Online VFI technology with sinus wave output
- Extendable battery options for long autonomy times
- Communication via USB, serial ports and networks
- Input with power factor correction
- Highly-sensitive early warning-shut down via MultiLink software
- At least five minutes battery-supported operation
- Settings, voltage and frequency according to individual configuration
- Hot-swappable batteries, can be changed by the user
- Cold start via battery
- Remote UPS monitoring via SNMP/Web card
- Compact 2 HU design up to 3000VA
- Optional bypass rack for easy maintenance



Liebert NX

- Expandable series from 30 to 120 kVA for 3-phase applications.
- Innovative technology, easy to use, low operating costs.
- UPS systems with true online, double conversion and digital technology; in various power ranges for backing up the overall availability of business processes in server rooms and medium-sized data centres.
- For telecommunications, networks, industrial movement and process automation in medium-sized factories as well as for transport automation and securing the performance of medical diagnostics.
- First class quality power supply.





Emerson Network Power is a consistent global technology leader and recognised expert that helps to secure business-critical processes, and by doing so contributes to a "business-critical continuity".

A series of the most diverse applications, including the tried, tested and proven Knürr rack system solutions and the thermal management connected with them, ensure the required network stability with the highest technological adaptability at the same time.

Knürr system solutions in the world of information and network technology are part of an adaptive Emerson Network Power architecture, which flexibly adjusts to all changes concerning security/safety, high-density and all associated capacities. Companies profit in a sustainable and long-term way from the high IT availability, operative flexibility and impressive reduction in investment and operating costs.

Knürr AG is recognised around the world as one of the leading developers, manufacturers and distributors of rack and enclosure platforms in the indoor and outdoor area, including all relevant active/passive components of 19" structures and the technologies connected with them.

Knürr is certified in accordance with EN ISO 9001 and the EN ISO 14001 standard. Knürr's quality management continuously guarantees the highest level of quality in all areas of the company.



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