A reliable power supply in every situation
Your expert for professional special solutions
Modern technology makes a great deal possible. We are connected worldwide, we can communicate irrespective of location and distance and we produce industrial goods around the clock. However, all this requires one thing in particular to ensure that everything functions smoothly and reliably: ELECTRICITY.

A reliable power supply is of existential importance in many areas. In basic social services, medicine or logistics, it is often a matter of SECONDS.

We take up this challenge with powerful and energy-efficient power supply systems for IT systems, computer centres and systems for industry and in critical sectors. Our products vary from standard systems through to highly-customised SOLUTIONS.

However, one thing always remains constant: our uncompromising demands on technology, quality and architecture. With maximum security of supply in every situation, we ensure that you never run out of energy. For ENDLESS POWER.

“Our motivation: the optimum solution for you – in every situation and in every environment. We do our best to achieve that every day”

Uwe Wöhrle
Managing Director of Wöhrle Stromversorgungssysteme GmbH
Power supplies - reliable for sure!

Where extreme demands are made on power supplies, Wöhrle is your specialist. Whatever your challenges may be, we are ready to face them: with extensive expertise in UPS solutions, decades of experience and great commitment to finding the perfect solution for you.

competences from which you can benefit

1. INNOVATIVE
   We move with the times, because continuous development of systems in an industrial environment and in complex IT infrastructures is a prerequisite for an optimum power supply at all times.

2. GREEN POWER
   When it comes to high energy efficiency and low CO₂ emissions, we are one of the sector’s leading companies. What we do now dictates our future.

3. HOLISTIC
   Appropriate service determines the service life and performance capability of every UPS system. Our highly qualified UPS technicians therefore take care of the whole spectrum – from the project planning phase through to the disposal of your old systems.

4. DEPENDABLE
   Everything we do stands for perfect quality and high reliability – everywhere and at all times. You can rely on that. Our more than 30 years of experience speak for themselves.

5. COMMITTED
   As an owner-managed company, we attach great importance to short distances and a trust-based dialogue with our customers, partners and suppliers. We take responsibility – and keep our promises.
Uncompromising reliability for your power supply

Wöhrle develops and produces intelligent power supply systems for industrial companies and computer centres. We promise power supply reliability in every situation.

In our competence centre in Steinenbronn, we produce tailor-made UPS systems, switch mode power supplies, DC UPS systems and transformers with renowned Swabian perfection. Whatever your challenges may be, we are ready to face them to find the best solution for you. That has been our credo for over 30 years.

With regional roots and international orientation.

As a specialist and technology leader in the industry, we have an international orientation and offer a broad portfolio of products and services. As a medium-sized, owner-managed enterprise, we can react quickly and flexibly to your requirements. For us, a reliable power supply means leaving the beaten track, questioning the status quo and even thinking outside the box. That is reflected in our efficiency philosophy, in the availability and the absolute reliability of our products. Our additional service and support goes far beyond what is normally offered in our branch of industry.

99% is not enough for us.

Whether in medicine, security, energy, the environmental sector, or in laser or energy storage technology: our cross-sector positioning makes us your ideal partner for all disciplines and areas - from development and production right through to application.

That is German engineering – all from a single source.
Excellence is our standard.
The Wöhrle performance portfolio

1. UPS SYSTEMS

Single-phase and three-phase UPS systems as monoblock units and modular rack-mounting UPS systems with an output ranging from 1 kVA to several MVA. These systems are characterised by very high effectiveness and energy efficiency for enormous savings potential and a sustainable use of resources.

2. DC UPS SYSTEMS

DC UPS systems with integrated energy storage units and as components for a modular, uninterruptible and redundant DC voltage supply. Energy storage units: long-life lead batteries, supercaps/capacitors, lithium batteries and high-performance energy storage cyclone cells.

3. SWITCH MODE POWER SUPPLIES

Single-phase, two-phase and three-phase power supplies of standard design with basic equipment and with a very slim design, with extended functions. The portfolio includes products for switch cabinet installation and for distribution board installation in building automation systems. It also covers various power classes with special output voltages.

4. TRANSFORMERS

Single-phase transformers with EI and UI core, three-phase transformers with 3UI core and with higher outputs, self-supporting coils and laminated cores. Suitable for use in machine and plant engineering, regenerative energy systems and building automation.

5. SPECIAL SOLUTIONS

Tailored special solutions and services for individual products and complete solutions. Thanks to our roots and special expertise in industrial environments, we are one of the few companies on the market able to produce power supply systems for critical and demanding environments.

6. SERVICE AND SUPPORT

Support in all phases of the power supply system’s life – from design engineering and professional maintenance right through to disposal and direct access to spare parts. 24 hours a day, 365 days a year.
Constant energy

Regenerative UPS systems

When braking special industrial systems such as grinding machines, energy is generated which “flows back” into the electrical circuit of the UPS system. That not only interferes with the function of any UPS system, but can even render the system inoperable and may damage the inverter and rectifier DC intermediate circuit. Special regeneration units convert the returning energy and ensure the full functionality of your UPS system.

Keeping the power flowing

UPS systems for industrial and critical environments

Unlike applications in IT infrastructures, industrial UPS systems must withstand the special challenges of harsh industrial environments. It is especially important to protect the UPS system against critical overvoltages. With us, you can rely on industrial-suited solutions and robust cabinet systems.

Highlights at a glance

- Overvoltage protection
- Overvoltage and phase sequence monitoring
- Air conditioning
- Service-friendly modular architecture
- Customer-specific design
- High temperature resistance thanks to special energy storage units
- Modular rack-mounting architecture allows simple module replacement
**Withstand every hot phase**

**Single-phase and three-phase UPS systems**

UPS systems with high-capacity energy storage units are characterised by a particularly long service life and battery capacity at high temperatures. Single-phase and three-phase UPS applications with double conversion technology, combined with powerful storage batteries and special cabinet systems if required, ensure independent operation for up to several hours. Both monoblock systems and modular UPS systems with parallel redundancy in the power modules are used to achieve this capability.

**Highlights at a glance**

- Significantly higher temperature resistance
- Storage for up to two years without recharging at a storage temperature of +25°C
- Service life of the battery system up to three times longer compared with conventional technology
- Drastically reduced recharging times: 90% of the nominal capacity after just 30 minutes
- Low discharge and internal resistance of the battery system

**Expected service life of the cyclone cells compared to conventional batteries:**

![Graph showing expected service life comparison](image)
It couldn’t be easier
Maintenance-free UPS systems

With maintenance-free supercapacitors, you benefit from a new dimension of high-capacity energy buffering. Since the service life of the energy storage units is up to 12 years, regardless of environmental conditions, this offers especially high customer benefits in industrial applications.

Highlights at a glance
- Maintenance-free energy storage units
- High energy density
- Independent of ambient temperatures
- Service life of the energy storage units approx. 12 years
- Extremely compact energy storage unit design

As individual as your needs
Constructive and optical adjustment of your UPS system

On request, we will individually configure the design and architecture of your UPS system as a homogeneous component of your overall system.

Highlights at a glance
- UPS architecture in stainless steel cabinet systems
- Special UPS cabinet architecture for robust applications in industrial environments
- Cabinets with protection type IP54 for the most comprehensive protection, e.g. against splashed water
- Air-conditioned UPS systems
**Efficient peak technology**

**Peak shaving**

One way of avoiding load peaks is to use a UPS with a larger storage unit. The UPS is controlled by an energy management system and can draw the power required from the load partially or completely from the mains or the energy storage unit by “source sharing”. As a result, not only your electricity costs can be reduced, but the connected systems can continue to be supplied by the UPS system in the event of mains power failures.

**Highlights at a glance**

- Mains fluctuations or brief interruptions have no influence on the supplied load
- Electricity costs can be drastically reduced
- Better load balancing of the power supply network
- Avoidance of load peaks
- High peak outputs with insufficient network connection output

---

**Special application**

**Modular rack-mounting DC and AC power supply**

Modular UPS systems with discrete DC and AC rectifier and inverter modules protect AC and DC loads at the same time with a common user interface.

**Highlights at a glance**

- Common control and monitoring of AC and DC unit via one central interface
- Intuitive operation via the 4.3” 480x272 high-resolution colour touchscreen display
- “Hot swappable” rack-mounting modules with MTTR of a few minutes and very high availability
- High energy density in a small installation space, N+1/N+N redundancy can be efficiently achieved
- All components for 19” racks, simple expansion or integration into existing infrastructure
Electricity is our heartbeat

Zero-problem strategy, particularly in a company’s critical areas
The heart of our work

More than standard

Wöhrle makes the difference

Our systems - suited for industry.
In addition to industrial quality cabinet systems with service-friendly modular architecture, we also use air-conditioning systems, a wide range of monitoring and protection components, as well as special energy storage concepts, where appropriate. This guarantees a significantly longer service life than that of conventional energy storage units.

Our solutions - a perfect fit.
Solutions tailored exactly to the needs of the customer, even for special requirements.

Environment - any.
Energy storage technologies adapted to the particular ambient conditions.

It must run - at all times.
Additionally integrated safety and monitoring components ensure comprehensive protection. These include rotary field and phase monitoring, phase asymmetry monitoring, voltage and current monitoring, equalizing systems for monitoring the individual battery cells and battery run-time limitation.

Printed circuit boards with protective varnish - that’s why.
For particularly high demands in damp and dirty environments and applications exposed to aggressive media.

100% supply reliability
Our standard is the benchmark
Special UPS solutions from Wöhrle

advantages that will convince you

1. Modular UPS architecture for maximum flexibility featuring scalability and redundancy (UPS and battery)

2. Low energy consumption and maximum energy efficiency

3. High performance with minimum operating costs (TCO)

4. Optimum serviceability

5. Maximum efficiency

6. Compact architecture and high power density

7. Output spectrum into the MVA range
A few examples in practice

In good company

“The University Clinic employs UPS systems from Wöhrle in IT network technology and for large medical appliances. Parts of the angiography and MR technology are also protected with UPS systems in order to be able to continue operating vital diagnostic equipment in the event of a mains power failure. The output of the used UPS systems lies between 10 and 160 kVA. When it comes to maintenance, we can also rely totally on Wöhrle.”

Ronald Wulf
University Clinic Tübingen

“We use modular UPS technology from Wöhrle to protect the control and positioning systems of our extrusion, printing and processing machines. In the event of a mains power failure, this enables the programs and file systems of the controllers and the format positioning units to be brought to a safe state. As our machines are exported worldwide, we attach the greatest importance to quality and reliability. That is why Wöhrle has been our partner for many years when it comes to power supply systems.”

Herbert Fischer
Windmöller & Hölscher KG

“In Aschheim near Munich, we operate the most modern scalable computer centre in Germany. High-efficiency modular and redundant UPS cells with an output of 1 MW are used here. Automatic transfer switches from Wöhrle ensure our loads are optimally supplied at all times. As a leading supplier of innovative IT solutions, we offer ‘More performance than standard’ - and that applies to Wöhrle as our partner, too.”

Herbert Fischer
Windmöller & Hölscher KG
Always there for you

Our services

With Wöhrle you are choosing perfect service and support in all phases of your power supply system’s life. From design engineering through to disposal.

From the moment your Wöhrle UPS system is covered by a service contract, your critical applications are protected even more comprehensively. With our routine checks and inspections, we can detect and remedy possible sources of faults in advance. In addition, you benefit from direct access to our spare parts inventory.

We are there for you – 24 hours a day, 365 days a year.

ADVICE AND PROJECT PLANNING
- Professional support during the project phase
- Assessment of demand and analysis evaluation on site
- Optimum dimensioning and selection of the appropriate product

APPLICATION
- Factory acceptance testing
- Installation
- Commissioning

MAINTENANCE AND SERVICE
- Training of your technical personnel
- Load measurement
- Thermography
- Battery installation, monitoring and replacement
- Preventive maintenance operations

DISPOSAL
- Dismantling and eco-friendly disposal of old systems
- Disposal of old batteries in accordance with the applicable regulations
Information in the data sheets is intended as a description of the product and is not considered a warranted characteristic in a legal sense. Any damage claims against Wöhrle Stromversorgungssysteme GmbH due to printing errors or for deviating / insufficient performance data are excluded. We reserve the right to further technological development and changes.