



DATACENTER

NEW POSSIBILITIES FOR MORE EFFICIENCY

5G, Big Data, digital Business, video on demand and real time communication require increasing data volumes. Modern and future Datacenters are facing all these challenges. The effective usage of available space and positive scale effects, lead to bigger and bigger Datacenters and thus consume more and more electrical energy. Furthermore, the requirements regarding efficiency, cooling and environment protection are becoming more important.

ICE®BAR offers you the electrical engineering technology to master these challenges. The superconducting busbar system ICE®BAR is the most efficient modular energy transport system worldwide delivered turnkey. The system allows the loss-free transmission of currents up to 200 kA and even more.

Discover your new possibilities and save between 15 and 20% of your energy costs. Transmit the electricity from the UPS at battery voltage level directly to your racks - with zero power losses. Transformers and rectifiers are not necessary any more.

ICE®BAR gives you more benefits:

Highest energy efficiency

The transmission of direct currents is completely loss-free, alternating currents with minimal losses. The system is operating at $-200\text{C} / 77\text{K}$ with liquid nitrogen and does not emit any waste heat. This way you achieve the highest energy efficiency.

Highest safety

ICE®BAR is IP68 certified and thus completely protected from dust and water. The total encapsulated design guarantees the highest personal safety standard.

Zero fireload

The outer casing of ICE®BAR is made of stainless steel. There are no combustible parts. The total encapsulated system is installed with zero fire load.

Compact and modular design

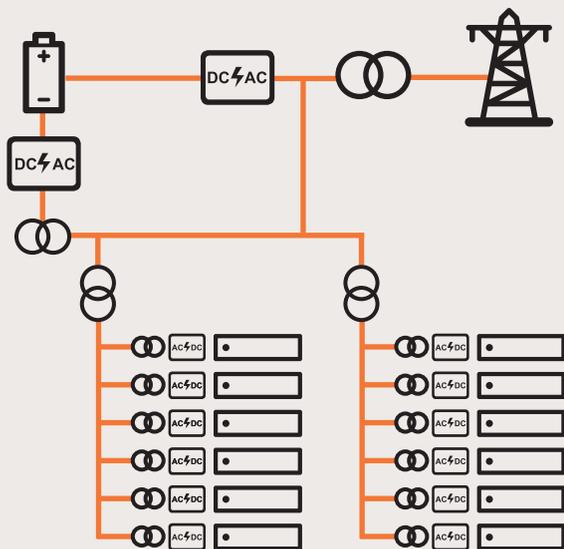
The modular design enables you to realize sharp bandings and an optimal integration into your construction design. You save time during the design and construction of your Datacenter. Our superconducting power system with high currents on low operating voltage requires less space than today's conventional energy distribution. The additional available space can be utilized productively for server space.

Higher PSU durability

Zero resistance does not produce any voltage drop on the power supplying super conductors. This guarantees a stable earth potential and prolongs the durability of your power supply units.

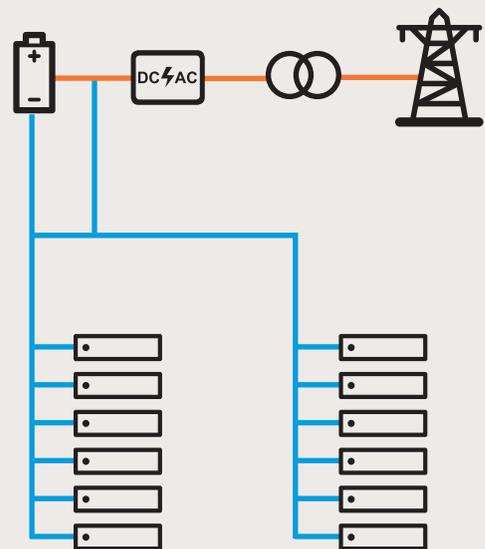
Go with us in electrical engineering towards a better future.

CONVENTIONAL POWER SUPPLY



*Many AC / DC Converters
and transformers needed*

SUPERCONDUCTING POWER SUPPLY



*Connect your servers directly with
battery voltage level*

SUPERCONDUCTORS DON'T WASTE ENERGY

Below their critical temperature superconductors carry very high currents without electrical losses.

This property allows the design and construction of highly efficient, ultra compact and lightweight energy transmission systems.

Comparing an entire conventional busbar system with a superconductor system, up to 90% of the energy can be saved.

ABOUT VISION ELECTRIC SUPERCONDUCTORS

We are pioneers in the field of efficient power transmission. We are curious, brave and sustainable.

VISION ELECTRIC SUPER CONDUCTORS is the avantgarde in the development of industrial applications based on superconductor technology. Our core competence is the loss-free and safe transport of high currents.

We take care of your whole project: starting from the design and construction to the commissioning and maintenance, we deliver turnkey solutions.

We have decades of experience in the field of plant engineering. We deliver best quality - made in Germany.