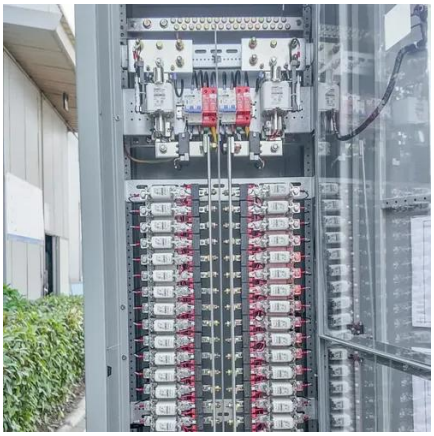
Prague high voltage inverter research and development

Overview

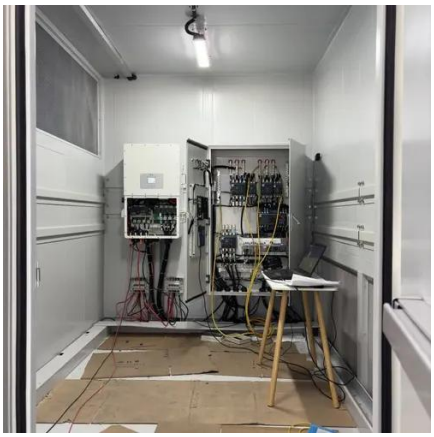
An important research focus is the development of voltage-controlled and grid-maintaining inverters for future electricity grids with a large share of renewable sources, as well as tests of micro-grid applications and improvements in control technology. Research is focused on current problems connected with the circuit structures of power electronic converters and algorithms for their control and diagnostics. The mutual interactions of converters with the machines that are fed from them and with the supply networks they are connected to are. In our Multi-Megawatt Lab we can study inverters and their effect on the electricity grid in the multi-megawatt range. In our Digital Grid Lab, we can test both individual solutions and complex systems in realistic surroundings. Tests of insulation systems, overvoltage measurements, partial discharge diagnostics, and research on materials used in the energy. The laboratory collaborates on projects aimed at the diagnosis and development of insulation systems of high-voltage equipment in the field of voltage testing according to standardized procedures or designs testing methods for research purposes. Established in 1953 under the auspices of the Czech Technical University's Research Institute, this laboratory has grown to become a specialist in testing.

Prague high voltage inverter research and development



13 things to know before going to Prague

With practical tips on transport and tickets, as well as useful info on health, safety and etiquette, here's what you should know before going to Prague.



Prague

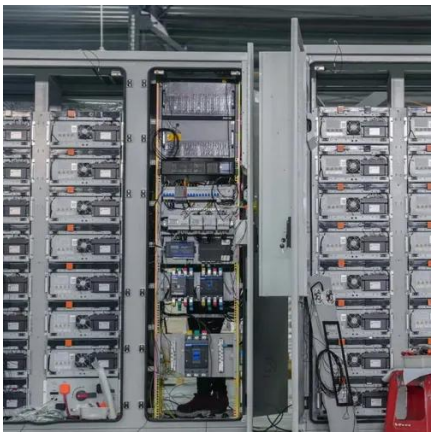
Prague, located on the Vltava River, has a population of about 1.4 million, while its metropolitan area is home to approximately 2.3 million people. Prague is a historical city with Romanesque, Gothic, ...

Prague Travel Guide

Everything you need to know about Prague: top sights and attractions, the best things to do, useful travel tips, mistakes to avoid, and more.

10 Things to Do in Prague (That are Totally Worth It)

This guide starts off with the top 10 things to do in Prague, perfect for those who are planning a quick trip to the city or only want to visit the "must-sees."

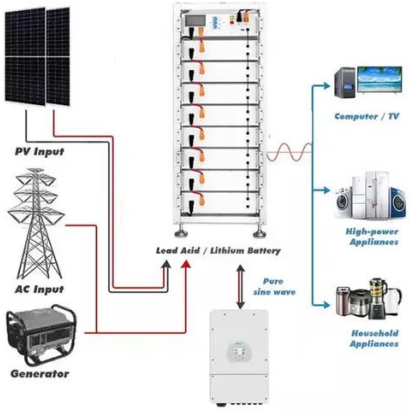


What is CVVOZEPowerLab?

Centre for Research and Utilization of Renewable Energy offers a unique technology of large research and development infrastructure for both scientific and industrial community in the field of high power ...

[Hybrid Overmodulation Strategy for Dual Two-Level Inverter With]

His research interests include mathematical modeling, parameter estimation, and efficient control of ac machines and power electronics' converters. He is also currently involved in teaching ...



High voltage engineering

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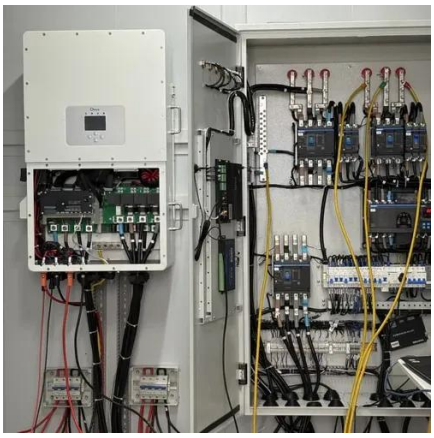


Trends in High Voltage Inverter Systems

Through these discussions, along with our own research, there are some clear high voltage inverter trends in the EV market.

[Prague: Gem of Europe with 100 Spires , VisitCzechia]

Experience Prague like never before! Step into the capital of the Czech Republic, a UNESCO World Heritage gem, where history, culture, and charm come alive. Wander through stunning architecture, ...

Prague

Established in 1953 under the auspices of the Czech Technical University's Research Institute, this laboratory has grown to become a specialist in testing across a broad spectrum, including low ...

Prague Travel Guide

Prague was once a hidden gem, overshadowed by its flashier neighbors to the west. But the city couldn't keep its marvels a secret for too long - now, it's a haven for travelers seeking

[Center for Power Electronics and Sustainable Grids]

An important research focus is the development of voltage-controlled and grid-maintaining inverters for future electricity grids with a large share of renewable sources, as well as tests of micro-grid ...

About us

The laboratory provides an extensive set of activities in the field of testing, research& development and consultancy in power engineering area. Since 1993 the laboratory has been accredited in compliance ...

[plan your trip to prague , Prague City Tourism]

Prague is not only a beautiful architectural gem, but also one of the most cultural cities in the world. Not for nothing is the thousand-year-old name of the metropolitan area Bohemia. You will experience the ...

High Voltage Laboratory

Students and scientists perform experiments aimed at improving the safety and reliability of electrical grids. The laboratory is part of the power engineering curriculum and plays an important role in the ...

THE 15 BEST Things to Do in Prague (2026)

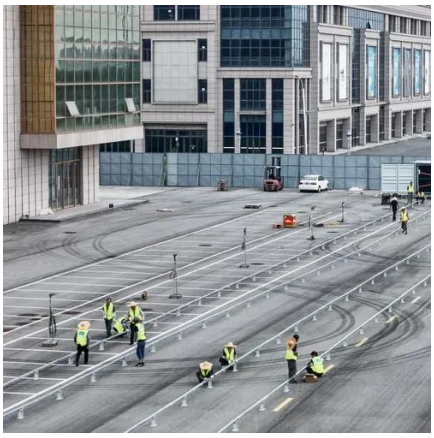
See what other travelers like to do, based on ratings and number of bookings. Book these experiences for a close-up look at Prague. These rankings are informed by Tripadvisor data--we consider ...

[50 Best Things to Do in Prague [with Tickets & Map]

From Gothic churches to a vibrant nightlife and a delicious food scene, the "Golden City" is a true gem of the Czech Republic. If you're planning a trip to Prague and don't know where to start, ...

[Pavel HRZINA , Professor (Assistant) , Ph.D.

Pavel Hrzina currently works at the Department of Electrotechnology, Czech Technical University in Prague. Pavel does research in Electrical Engineering and Materials Science.



[Laboratory of Power Electronics and Electrical Drives , Institute of

We applied both concepts to the research of control strategies of inverters connected to the grid. The experimental results were evaluated and compared with the results of simulation predictions ...

[Prague , History, Map, Population, Language, Climate & Facts

Prague, city, capital of the Czech Republic. Lying at the heart of Europe, it is one of the continent's finest cities and the major Czech economic and cultural center. The city has a rich ...

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