

500kWh High-Frequency Switching Power Supply for Relay Protection



Overview

This high-frequency switching power supply DC screen is suitable for 10-500KV substations and power plants. It provides stable DC output for high-voltage switches and relay protection. The high-frequency transmission significantly reduces the size and design of the transformers. GE Vernova's Protection, Control, and Metering solutions deliver precise, high-performance automation for today's evolving grid. From advanced relays to multifunction meters, our portfolio helps utilities enhance reliability, streamline operations, and accelerate the energy transition. Long term cost reduction (TCO) for trainings and maintenance by reduce variety of relays A fast and selective arc fault mitigation for air-insulated LV & MV switchgear and Relion protection and control relays and sensor technology protect staff and plant facilities for many years.



Article Content

Feb 02, 2026

SMPSRM.rev4

Switching power supplies operate by rapidly switching the pass units between two efficient operating states: cutoff, where there is a high voltage across the pass unit but no current flow; and saturation,

Mar 01, 2026

Power System Protective Relays: Principles & Practices

This presentation reviews the established principles and the advanced aspects of the selection and application of protective relays in the overall protection system, multifunctional numerical devices

Apr 20, 2026

What Is a Switching Power Supply (SMPS)? | Tektronix

Discover what a switching power supply (SMPS) is and how it efficiently converts AC to DC using high-frequency switching. Learn its

Jan 18, 2026

Failure causes and solutions of relay protection switching power supply ...

Share this article Article information Abstract Relay protection device plays a key role in the stable operation of power grid, and the failure of switching power supply is the main reason for the unstable

Jul 28, 2025

High and Very High Frequency Power Supplies for Industrial

The papers in this special section focuses on high and very high frequency power supplies for industry applications. In recent years, high frequency has become a developing trend for power

Aug 22, 2025

Basic protection relay knowledge

A fast and selective arc fault mitigation for air-insulated LV & MV switchgear and Relion protection and control relays and sensor technology protect staff and plant facilities for many years.

Sep 13, 2025

HVPS High voltage supplies

High-voltage power supplies with constant current or constant voltage like our High voltage supplies are used in a wide range of applications. The control accuracy

Nov 07, 2025

Specifications Product datasheet ATV630U22N4

Three-Phase Power Supply with Upstream Breaking via Line Contactor Connection diagrams conforming to standards EN 954-1 category 1 and IEC/EN 61508 capacity SIL1, stopping category 0

Jul 08, 2025

What Does SMPS Stand For In Electrical Terms: Power

A switching power supply converts AC voltage to regulated DC using high-frequency switching technology. It provides 80-95% efficient power

Nov 07, 2025

Switching Power Supply Technical Manual

Switching power supply uses a high-frequency transistor to chop the high DC voltage (rectified from AC source) into high AC voltage and converts it into a desired voltage by a high-frequency transformer,

Apr 14, 2026

High-Efficiency Switching DC Power Supplies: For Industrial and ...

With over 30 years of design and manufacturing knowledge, Voteg regulated switching power supplies have set a new standard in flexibility, reliability and cost-effectiveness. Our variable switching DC

May 14, 2026

Switched Mode Power Supplies

Switched-mode power supplies (SMPS) are defined as power supplies that utilize semiconductor switching technology to convert input voltage to the desired output voltage, offering advantages such

Nov 29, 2025

High Voltage Relays Selection Guide: Types, Features ...

High voltage relays must be designed to switch larger loads and handle high in-rush currents. This requires careful consideration of the relay's load switching capability and the use of

Jan 15, 2026

High-Frequency switching power supply DC System

TBGZS series high-frequency switching power supply DC system is widely used in power plants and substations of all levels, providing DC power for loads such as circuit breaker Opening and closing,

Nov 01, 2025

Protection, Control & Metering

GE Vernova's Protection, Control, and Metering solutions deliver precise, high-performance automation for today's evolving grid. From advanced relays to

Nov 07, 2025

High Frequency Switching Power Supplies

Find High Frequency Switching Power Supplies related suppliers, manufacturers, products and specifications on GlobalSpec - a trusted source of High Frequency Switching Power Supplies

Feb 21, 2026

Power Switching Solutions using High Voltage Relays

High voltage relays for power switching and control. Hengstler's robust relay solutions for electrical power systems and high-voltage applications.

Apr 11, 2026

HIGH POWER SWITCHING POWER SUPPLY

HIGH POWER SWITCHING POWER SUPPLY Description The power supply adopts high frequency switching power technology. It is controlled by high performance

Jan 11, 2026

Societal and technology trend report

The crisis of traditional relay protection: A disruption of the technological paradigm Using the high short-circuit currents and system inertia provided by synchronous generators, traditional relay protection

Feb 18, 2026

High-frequency power supply

Find your high-frequency power supply easily amongst the 52 products from the leading brands (Kikusui, Voita, Wisman, ...) on DirectIndustry, the industry

Dec 19, 2025

Modeling and Simulation of High-frequency Switching Power Supplies

These power supplies are widely used in a variety of applications, such as telecommunications, computing, automotive electronics, and renewable energy systems. The growing demand for smaller,

Dec 12, 2025

Failure causes and solutions of relay protection

This paper studies the failure causes of relay protection switching power supply, and concludes that electrolytic capacitor is the key component

Oct 13, 2025

High Voltage Relay Contactor Selector Guide Hi

Selector Guide Overview In this High Voltage Relay & Contactor Selector Guide, we explore our extensive selection of high voltage relays and contactors from our many supplier partners, as well as

Sep 23, 2025

rf power supply design and layout guide

Introduction Radio Frequency (RF) power supplies are essential components in various applications, including telecommunications, broadcasting,

May 23, 2026

SEL-700G Generator Protection Relay

The SEL-700G is the right solution for utility and industrial generator protection, with autosynchronizer, flexible I/O, and advanced communications. Apply the SEL

Jun 28, 2025

CSM_PowerSupply_TG_E_8_3

Switch-mode Power Supplies Switch-mode Power Supplies take commercial AC power as the input and convert it to high-frequency power using the high-speed switching of semiconductors to obtain the

Oct 14, 2025

SIPROTEC Protection Relays | Siemens

High-performance protection Future-proof your power supply with protection relays and control for digital substations. SIPROTEC includes:

Jul 27, 2025

High-Frequency DC Power Supply for 10-500KV Systems | Merhein

This high-frequency switching power supply DC screen is suitable for 10-500KV substations and power plants. It provides stable DC output for high-voltage switches and relay protection.

Contact Us

For more information, pricing, or custom solutions, please contact us:

Website: <https://www.regen-power.co.za>

Email: info@regen-power.co.za

Phone: +49 176 845 2036

Address: Taunusanlage 15, 60325 Frankfurt am Main, Germany

This document is for informational purposes only. Specifications subject to change without notice.

