



As experts in DC power supply, we collaborate with you to design and implement the ideal solution tailored to your project's requirements, considering efficiency, reliability, and cost-effectiveness.

We offer containerized power supply systems with thyristor/SCR and IGBT technologies, ideal for Alkaline, PEM, and SOEC electrolyzers. These are perfect for projects where minimizing footprint and ensuring seamless site integration are critical.

For smaller installations or projects with flexible layouts, we provide standalone units engineered to your specifications, along with complete project support.

Our solutions are adaptable to various project parameters, such as electrolyzer ratings, hydrogen facility sizes, and centralized or distributed hydrogen production setups, powered by either grid or renewable energy sources.

Backed by decades of expertise, we actively support the energy transition by bridging renewable sources with end-users, enabling both Power-to-Gas and Gas-to-Power processes, and strengthening the green hydrogen value chain.

Industrial DC Power Supply for Electrolyser



2x558kW Containerised Rectifiers - 3600A/ 155V for NTPC, Leh Green Hydrogen Mobility Pilot Project (Forced Air-Cooled; Outdoor Container Type)

ABOUT STATCON ENERGIAA

Statcon Energiaa is an Indian power electronics manufacturer that serves vital industries such as Solar, Defence, Power, Railways, and Green Hydrogen.

We have a legacy of 37+ years of technology excellence in designing and manufacturing equipment for static energy conversion, covering a broad spectrum of power, **especially Static Converters/ Rectifiers.**

TECHNICAL SPECIFICATION

INPUT	
Input AC voltage	0.4 - 35 kV
System Transformer	Customized
Auxiliary input	230 VAC, 50/60 Hz
Power factor	>0.95 @ Rated Load & Nominal Input
THDi	< 5% at rated output with nominal input supply as per IEE519-2022
OUTPUT	
DC Voltage	50 -1200 VDC
DC Current	Up to 10kA. (Higher currents up to 40 kA on request)
Current ripple	
Efficiency (peak)	95%
Topology	6/12/24 Pulse
CONFIGURATION	
AC Input	From Side or Top
DC output	Bottom or top
Cooling Type	Forced Air (Water cooling on request)
ENVIRONMENT AND PROTECTION DEGREE	
Design Ambient Temperature	5 Deg. C to 50 Deg. C Dry heat
Humidity	35 Deg. C at 95% RH (non-condensing)
Altitude	<1000m above MSL
IP protection degree	up to IP41
CONTROLS	
Digital voltage control	Yes
Digital current control	Yes
Digital power control	Yes
COMMUNICATIONS	
According to customer requirements	PROFINET, Modbus TCP/IP
STANDARDS AND CERTIFICATIONS	
Conformity	EN 62477, EN 60146
EMC	EN 61000
Functional safety	up to SIL3 acc. to EN 61508

FEATURES

- Designed for a wide input supply range to withstand harsh weather conditions
- Can power Green Hydrogen Electrolysers that use Proton Exchange Membrane (PEM) or Alkaline Technology
- These units are designed to operate in high and low temperatures without output power degradation - outdoor units up to 50°C and indoor units up to 45°C
- Works with forced air-cooling, eliminating the use of air-conditioning (water-cooled available on request)
- Air-cooled or oil-cooled isolation transformers available as per requirement
- High conversion efficiency owing to single conversion
- Guaranteed service life of 25 years with locally available spares and service support
- Proven reliability with rectifiers successfully operating in Indian and international naval dockyards for over 20 years
- Advanced control system: intuitive touchscreen with integrated PLC for fast response, remote operation, and data logging
- Rugged and time-tested Thyristor Converter Technology along with 12/24 pulse designs, using 'galvanically isolated transformer' and specially designed Inter-Phase transformers and filters. This ensures a clean DC output and high-quality input line parameters like harmonics and PF.

SINGLE LINE DIAGRAM

