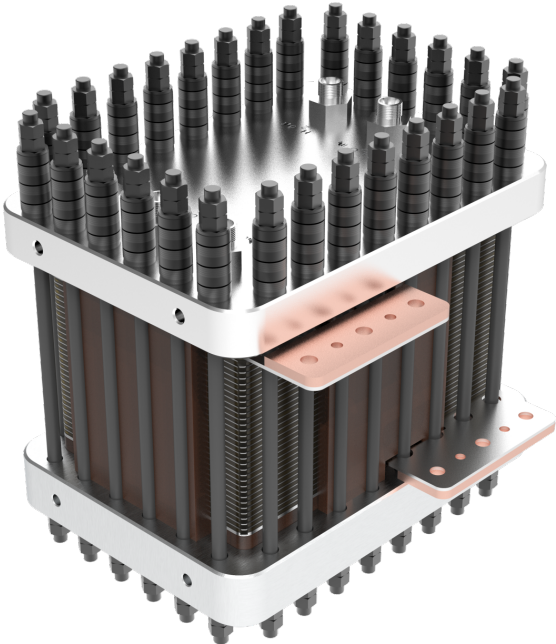


MEDIUM-SCALE PEM ELECTROLYZER

ST-PEME-5

PEM water electrolyzer for nominal pure-hydrogen production of 5 Nm³/h. This document covers the electrolyzer assembly described in the supplied source page, not a complete packaged hydrogen-production system.



5.0	Nm ³ /h PURE H ₂ OUTPUT
3.5 MPa	MAX. WITHSTANDING PRESSURE
34	CELL / LAYER COUNT
355 A	RATED CONSTANT CURRENT

APPLICATION FIT

Reference fields stated in the source brochure

Energy systems Fuel cells, combined heat and power (CHP), and microgrids.	Industrial technology Semiconductor applications and related fields.
Integration status Balance-of-plant, drying and controls are outside the defined source-page scope.	Customization Tailored solutions are described as available for specialized applications.

Document status

Standard configuration, customizable for project requirements. Published values are based on the supplied manufacturer source; the issued quotation and project technical agreement define the final interfaces, guarantees, acceptance criteria and supply scope.

TECHNICAL DATA

Standard configuration specifications

PARAMETER	UNIT	STANDARD CONFIGURATION	SOURCE NOTE
Product model	-	ST-PEME-5	ST Hydrogen designation
Total gas production rate	Nm ³ /h	7.5	H ₂ /O ₂ mixed total stated
Hydrogen production rate	Nm ³ /h	5.0	Pure hydrogen output
Circulating-water temperature	deg C	25-70	-
Circulating-water flow	m ³ /h	≥ 1.2	Pure / deionized water
Circulating-water conductivity	uS/cm	≤ 1	ISO 3696:1987 Grade 1 stated
Circulation method	-	Water-pump circulation	-
Hydrogen purity	%	99.99	After drying
Electrolysis method	-	PEM water electrolysis	Proton exchange membrane
Maximum withstanding pressure	MPa	3.5	Not operating pressure
Number of layers	pcs	34	-
Single-cell voltage	V	1.75-2.5	-
Constant current	A	355	Rated current: 355 A
Constant voltage	V	102	Supply configurable up to 102 V required
Dimensions without lugs/connectors	mm	382 x 280 x 431	L x W x H
Dimensions with lugs/connectors	mm	382 x 324.5 x 431	L x W x H
Weight	kg	95	-

Values such as flow, purity and pressure are standard published values; project-specific guarantees remain subject to the controlling technical agreement.

INTEGRATION & QUALIFICATION

Items to confirm before quotation

Electrical supply Rectifier topology, DC regulation, ripple, protection and cable / busbar interfaces.	Thermal management Water inlet temperature, flow, pressure drop, heat rejection and cooling-loop materials.
Gas separation Hydrogen / oxygen separation, drying, purification and gas-quality verification method.	Pressure boundary Operating and outlet pressure, relief devices, test basis and downstream equipment.
Controls & safety Sensors, leak detection, purge logic, interlocks, emergency stop and communications.	Mechanical integration Mounting, lug / connector clearances, piping loads, ventilation and service access.

BROCHURE-STATED ATTRIBUTES

Independent development The source describes the electrolyzer as independently developed and manufactured.	Pressure tolerance The source links pressure tolerance with high-purity hydrogen production; guaranteed conditions require confirmation.
Materials and engineering Premium materials, precision engineering and extended lifespan are brochure-stated attributes.	Power compatibility Compatibility with wide power fluctuations is stated; allowable transient envelope is not provided.
Current-density operation High current density with stable-voltage operation is stated without a guaranteed curve.	Tailored solutions Specialized configurations remain subject to engineering review and written scope definition.

COMMERCIAL & TECHNICAL RESPONSIBILITIES

ST Hydrogen is the international commercial brand operated by Scribble Tree Import & Export Co., Ltd. Scribble Tree coordinates international specification, contracting, export documentation and customer communication. Manufacturing and technical supply are provided by Chunhua Hydrogen Technology.

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DISCLAIMER

Images may show manufacturer-branded equipment. This is an electrolyzer-component datasheet and does not define a complete hydrogen-production package. Specifications are subject to configuration and product development. The issued quotation, technical agreement, acceptance criteria and contract are controlling.