clean.
Minimizes carbon emissions and eliminates toxic fumes

compact.
Reduces battery systems in size

safe.
Methanol is easily biodegradable

SIQENS QE Charge

From methanol to hydrogen

As a liquid energy carrier, methanol offers advantages for the operation of fuel cells that cannot be realized with gaseous hydrogen: simple transport, non-loss storage, and high energy density. Inside the SIQENS Ecoport, hydrogen is derived from methanol and used to generate electrical energy directly at the fuel cell stack. Methanol thus serves as a liquid hydrogen carrier which – as a renewable fuel – effectively eliminates carbon emissions.

While direct methanol fuel cells are usually operated with ultrapure methanol, the SIQENS Ecoport uses a conventional methanol that corresponds to the industrial standard. The fuel is available at local chemical dealers or can be purchased directly from SIQENS in the convenient and ADR-certified 25 liter fuel cell cartridge SIQENS QE Charge. Thus you enjoy independence regarding your fuel supply as well as in the process of power generation.

Independence from fossil fuels

SIQENS fuel cells combine the benefits of clean and silent fuel cell technology with a liquid fuel – methanol. You and your customers benefit from easy handling and low fuel consumption – while directly contributing to the global reduction of carbon emissions. Using renewable methanol allows for a carbon-neutral operation. With the SIQENS Ecoport 800 you are independent from fossil fuels. In short: a sustainable and economical solution that meets the challenges of the 21st century.

replacing
diesel generators.
with SIQENS
fuel cells.

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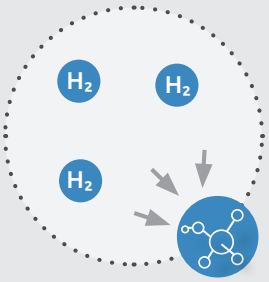
sales@siqens.de, www.siqens.de

1 Fuel of the future

Methanol is a key component for the production of hundreds of industrial and consumer goods for everyday use. Its outstanding properties make it the ideal energy source – and a sustainable fuel for SIQENS fuel cells:

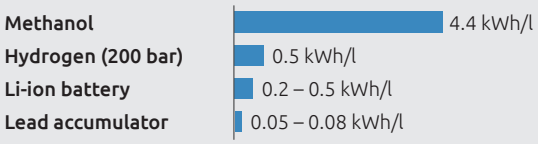
Carbon-neutral

Clear pathway towards production from renewable sources such as municipal waste, biomass and recycled carbon dioxide unlocks carbon-neutral energy production



10x High energy density

Higher energy density compared to hydrogen in compressed gas cylinders and lithium-ion batteries.



Simple logistics

Liquid fuel with existing infrastructure and distribution network – the best way to store hydrogen.

Low environmental impact

Occurs naturally, dissolves in water, and is easily biodegradable. Methanol can be used in places where diesel and gasoline are prohibited.

Globally available at low cost

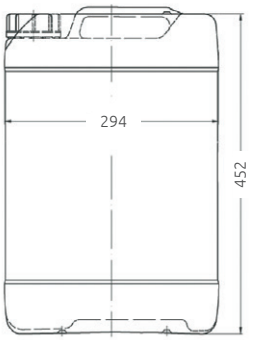
As a fuel that is traded on a global scale, methanol is locally accessible at competitive prices.

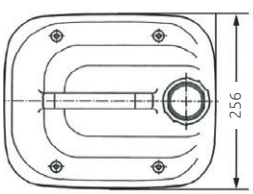
Technical Data – SIQENS QE Charge fuel cell cartridge

SIQENS QE Charge	
Dimensions (L x W x H)	294 (± 6 mm) x 456 (± 6 mm) x 256 mm (± 6 mm)
Content	Methanol (IMPCA, > 99.85%)
Volume	25 liters
Energy content	ca. 42 kWh
Weight (net)	22 kg
Certification	UN 3473 Fuel cell cartridge

Technical specifications may be subject to change. 202012, Version 1

Scale
SIQENS QE Charge
Methanol cartridge





All dimensions in mm