



\*Data related to average calculated performance data

## PRODUCT DESCRIPTION:

The oPOWER product range from H<sub>2</sub>-Industries is designed to process large quantities of organic residual and waste materials. These include, for example, plastic waste as well as biogenic residues (hydrocarbons (C<sub>m</sub>H<sub>n</sub>)) from agriculture and forestry and waste from the food industry as well as sewage sludge. By means of the integrated thermolysis plant, hydrogen is generated in a controlled manner from the above-mentioned waste materials, which is fed directly to the integrated PEM fuel cells within the plant, which is based on 20-foot standard containers, and converted into electrical and thermal energy.

The resulting waste heat from this process must be removed from the plant and can be used for downstream processes or other applications. The electrical energy can be used directly for downstream consumers. Waste thus no longer becomes a problem, but a valuable solution for a climate-friendly energy supply, since the CO<sub>2</sub> released in the thermolysis process is captured and not released into the atmosphere.

This opens up new market opportunities as a producer for a CO<sub>2</sub>-free energy supply.

## GENERAL INFORMATION:

Dimensions in mm (LxWxH)	6,058 x 2,438 x 2,591 mm
Weight	ca. 20,000 kg

## INPUT PARAMETERS:

Organic Waste (C <sub>m</sub> H <sub>n</sub> )	ca. 100 kg / h
Water	ca. 280 l / h

## OUTPUT PARAMETERS:

CO <sub>2</sub> captured in bottles	ca. 300 kg / h
Energy Output / h (P <sub>el</sub> & P <sub>th</sub> )	ca. 750 kW <sub>el</sub> & 450 kW <sub>th</sub>

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