



# Watermeln gives you energy

## WM-200 V2 Product Sheet



# About us

We are a sustainable startup focused on providing a sustainable solution for projects without (or with a limited) grid connection. With our extensive knowledge of making the Netherlands more sustainable through battery and hydrogen technology, we are ready for the future of smart and green energy.

## Key Principles

- Use of refurbished battery cells
- No on-site CO<sub>2</sub>, NO<sub>x</sub>, and particulate emissions
- Green-certified hydrogen

## Our Mission

Our mission is to make all diesel generators worldwide obsolete by providing affordable electricity anywhere, anytime.

## Our Services

The hydrogen generator designed and developed by Watermeln and Accenda are the clean alternative to diesel generators. It consists of a fuel cell for 24/7 base load power and a battery for peak load capacity. By connecting our system to additional batteries, we can increase peak output to megawatt levels.



**CAPACITY**  
Flexible 7 MWh per trailer

**TECHNOLOGY**  
Li-ion battery & PEM Fuel Cell

**OUTPUT**  
CEE & Powerlock  
350 kW peak, 200 / 80 kW cont.



# WM-200

## The offer

1. Hydrogen Generator(s) of 200 kW / 70 kW AC
2. Green hydrogen with storage tanks
3. Installation, transport, and monitoring
4. Basic cabling and hoses for the hydrogen generator and hydrogen storage tanks

## Pricing Structure

Our pricing consists of two components:

1. Usage rate (based on the selected hydrogen storage)
2. A fixed service rate for installation, rental, and monitoring of the Watermeln 200 and H<sub>2</sub> storage

Best Suited For:

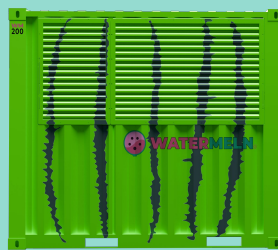
- This unit is highly suitable for projects with high consumption and peak loads (up to 350 kW peak and 1700 kWh per day).
- A fuel cell has higher rental costs, but due to its high efficiency, it has low usage costs.
- Completely emission-free and low noise.



## Design



FRONT



RIGHT SIDE



BACK



LEFT SIDE

# WM-200

## Specificaties V2.0

<b>Power</b>	Peak: 350 kW AC Battery: 200 kW AC Fuel cell: 70 kW Ac
<b>Capacity</b>	Li-ion battery NMC with capacity of 120 kWh
<b>Output</b>	2x Powerlock 380A 2x 125A 5p
<b>Input</b>	1x 63A 5P (max 22 kW)
<b>Hydrogen</b>	<u>Gascontrol (external)</u> High pressure connector: ISO 5145 No. 38 W30 2x LH Input: max 350 bar working pressure Output: 30-35 bar (Quick connect)  <u>WM-200</u> Input: 30-35 bar (quick connect), minimum input 20 bar
<b>Enclosure</b>	Formaat: 10 feet; 2,99 x 2,44 x 2,59 meter Rating casing: IP15 Weight: 4500 kg
<b>Safety and certificates</b>	ADR road transport CE inspection (NEN-EN-ISO 12100:2010, NEN-EN 13854:2019, NEN-EN-IEC 60204-1:2018, PED 2014/68/EU SEP art. 4.3) Explosive safety document (ATEX)
<b>Monitoring &amp; control</b>	My Watermeln cloud monitoring GPS & 4G online monitoring and commands Physical control and monitoring
<b>Operational</b>	Temp: -15 till 40 Degrees °C (active conditioning and antifreeze safety)  Efficiency: $\geq 45\%$ LHV (15 kWh <sub>e</sub> / kg H <sub>2</sub> ) Maximum tilt of 15° above 0° celsius temperature and maximum of 9° under 0° celsius
<b>Modus AC</b>	Making grid or follow grid Fixed power Set point Standby

# Info

Watermeln takes care of everything. We provide green power at any location, whenever needed. The service includes installation, active monitoring and maintenance.

## Applications

The hydrogen generators are the solution for projects without (or with limited) grid connection:

- Festivals and events
- Construction sites
- Fast charging for EVs and (construction) equipment
- Logistics hubs with congestion issues
- Shore power (50 & 60 Hz)

# Safety and guidelines

The staff at Watermeln is trained to ensure the safe operation of the hydrogen generator. They work in accordance with the standards and guidelines of PGS 15, PGS 37-1, ATEX 114, and the "Safe Living Environment Guideline: hydrogen generators" (WP2; Oct 2023). A comprehensive safety and regulatory plan is available upon request from Watermeln.

1. Arrangements to be made in advance: We recommend notifying the relevant authorities (fire department and municipality) of planned hydrogen activities at least 4 weeks in advance.
2. Analyze whether the activity aligns with the local environmental plan, or if exemptions and/or permits may be required. The step-by-step guide in Appendix 1.1 can be used as a reference.

## Setup Requirements:

1. The entire system is set up outdoors.
2. Horizontal placement up to a maximum of 15° on a stable surface with a minimum load-bearing capacity of: WM-200: 470 kg per m<sup>2</sup>, Hydrogen tank (MEGC): 650 kg per m<sup>2</sup>.
1. Equipped with collision protection for locations with forklift traffic and lanes with speeds > 15 km/h.
2. High fencing (2m) around the WM-200 and hydrogen tanks, featuring warning signals for explosion and fire hazards and a no-entry policy for unauthorized persons.
3. Must be accessible at all times for emergency vehicles (minimum width of 3.5 meters and height of 4.2 meters).
4. Grounding of the WM-200 and the hydrogen tank/bundles using grounding rods.
5. The ATEX zone must be kept free from (potential) ignition sources at all times. For the Watermeln setup, ATEX Zone 2 applies, with a radius of 1 meter in the following locations: hydrogen tank connection, hydrogen connection at the WM-200, and Gas Control. See the image on the next page for clarification.

## On-site Work Instructions:

1. Check the entire system for any damage before turning it on. If the shock label indicator (see Appendix 4) near the control panel is RED, do not turn on the system and contact Watermeln.
2. Wear personal protective equipment (PPE) within the ATEX zone: anti static clothing, anti static safety shoes, and a hydrogen ppm detector.
3. In an ATEX zone, mobile phones, smartwatches, and portable electronic devices that could cause ignition are prohibited. This also applies to tools without ATEX certification.

# ATEX zone

An ATEX Zone 2 applies around the pressure regulator, hydrogen tank(s), and hydrogen connection on the Watermeln, and a safe zone with a radius of 1 meter must be established.

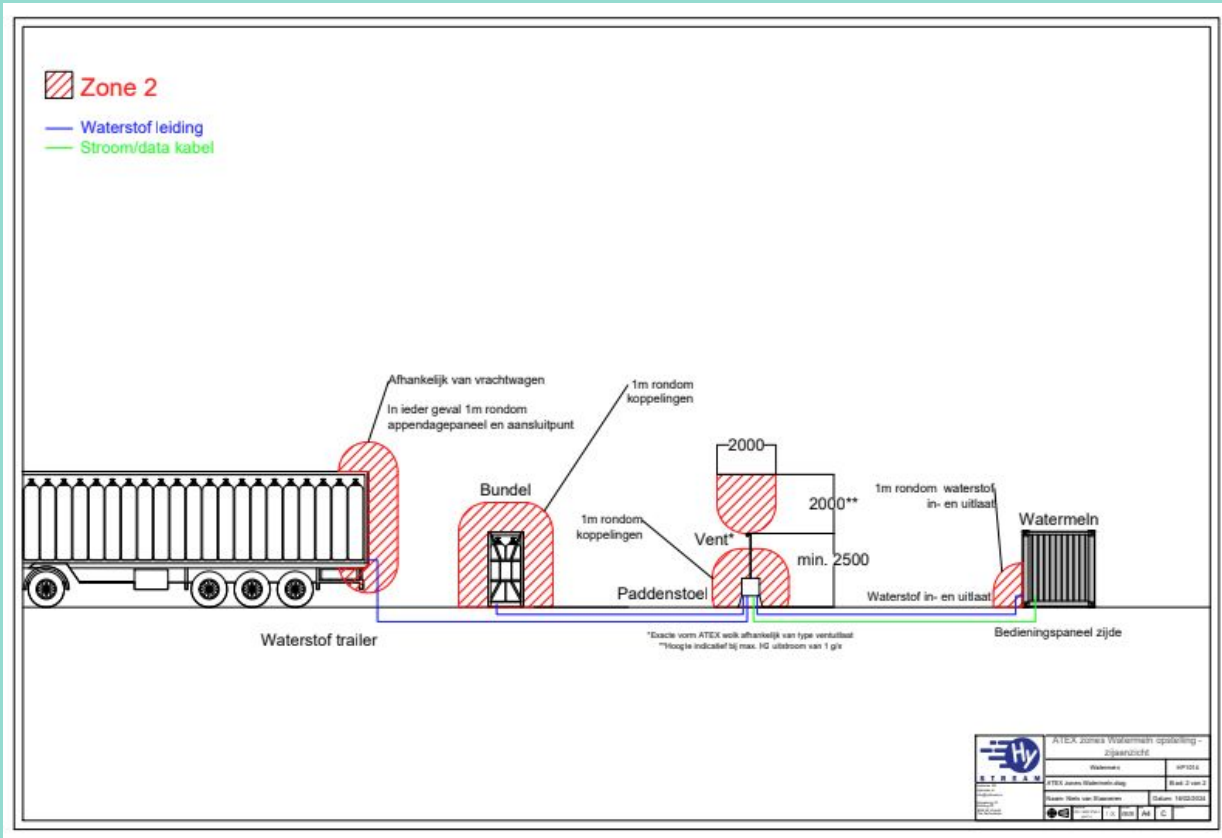


Figure 1: ATEX zoning of a Watermeln unit connected to hydrogen bundle or hydrogen tank.



Happy partners &  
customers



We look forward to your response!

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