



# MegaFlex

"Plant-as-a-Product" – A Turnkey Solution for Green Hydrogen Production

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## MegaFlex

"Plant-as-a-Product"

## - A Turnkey Solution for Green Hydrogen Production

MegaFlex is Wison Engineering's integrated turnkey solution for green hydrogen production, developed based on the "Plant-as-a-Product" concept and incorporating Sungrow Hydrogen's leading electrolyzer technology.

Leveraging Wison's proven track record and modular delivery capabilities in energy engineering projects, MegaFlex transforms green hydrogen plants from traditional engineering projects into standardized, replicable, scalable, and rapidly deployable products. This approach ensures safe, stable, and reliable operation of large-scale projects while targeting lower levelized cost of hydrogen (LCOH) and accelerating project delivery.

Beyond hydrogen, MegaFlex can be extended to ammonia, methanol, methane, and sustainable aviation fuel (SAF), enabling integrated planning and co-design across the full value chain. By doing so, it provides systematic, sustainable clean energy solutions, offering global customers a safer, more efficient, and more cost-effective pathway to clean energy.



Product Series	MegaFlex 100	MegaFlex 500
Plant Capacity	100 MW	500 MW
Rated Hydrogen Flow	1798 kg/h	8990 kg/h
Hydrogen Purity	99.999%	99.999%
Hydrogen Pressure	16 barg	16 barg
Operating Temperature	90±5°C	90±5°C
Plant Efficiency@BoL	52.1 kWh/kg	52.0 kWh/kg
Stack DC Consumption	<4.5 kWh/Nm <sup>3</sup>	<4.5 kWh/Nm <sup>3</sup>
Footprint-Hydrogen Production	0.8 ha	3.5 ha
Footprint-Plant	1.8 ha	7.8 ha
Sound Pressure Level	85 dB at 1 m	85 dB at 1 m
Cooling Water 32-42°C	2400 t/h	12000 t/h
Chilled Water 7-12°C	180 t/h	860 t/h
Purified Water	16 t/h	81 t/h
Compliance	ISO22734-2019; GB; ASME; NFPA 2; IEC; CE Certification	



MegaFlex is a Plant-wide Turnkey Solution Covering Hydrogen **Production and Utility / Auxiliary Systems** 

MegaFlex is built on the "Plant-as-a-Product" design philosophy. "Mega" represents the large-scale hydrogen production capacity of a single system, while "flex" highlights its high scalability and compatibility. It adapts to fluctuating renewable power inputs, supports projects from megawatt to gigawatt scale, and integrates with various electrolyzer technologies - including alkaline and PEM - to meet diverse green hydrogen development needs.

#### Standardized, Serialized

The MegaFlex solution is architected for hydrogen plants across multiple capacities. Through solution optimization, its standardized design enables rapid configuration and deployment with minimal adaptations when addressing custom requirements.

#### Intelligent

MegaFlex integrates Wison's proprietary ReIPS intelligent simulation platform, enabling configuration optimization and control strategy adjustments based on upstream renewable data, downstream demand, and operational requirements, thereby optimizing both CAPEX and

#### Modularized

Wison delivers highly modularized, plantwide facilities through advanced engineering capabilities in modular planning, design, and end-to-end execution. This modular approach reduces on-site construction costs and shortens project duration.

#### **Lower Levelized Cost** of Hydrogen (LCOH)

- Intelligent Simulation & Planning
- Highly Modularized
- High-quality & Cost-effective Supply Chain
- Advanced Equipment

#### Safe & Reliable

- Extensive Engineering Experience
- Intelligent Control Systems
- Proven Technology
- Lifecycle Services

#### Flexible Scalability, **Rapid Delivery**

- Rapidly-deployable
- Scalable
- Shorten On-site Construction Duration
- Minimize Uncertainties

#### **Environmental Friendliness**

- Minimized Footprint and Ecological Disruption
- Compatible with Green Electricity

### **Comprehensive Turnkey Solutions** for Green Hydrogen and Its Applications

Wison Engineering is deeply engaged in the green hydrogen value chain, with a strong focus on the development and application of green hydrogen and its high value-added derivatives, including green ammonia, green methanol, green methane, and sustainable aviation fuel (SAF). By delivering low-carbon solutions, we provide comprehensive support for our clients' green transformation.

Leveraging full value-chain service capabilities, Wison Engineering offers integrated turnkey solutions - from project consulting and technology design to modular fabrication and EPC contracting - supplemented by diversified financing services covering the entire project lifecycle. Through technological innovation, efficient delivery, and financial enablement, we help clients accelerate the commercialization of green hydrogen projects and jointly advance the global energy transition.



