



# POSEIDON

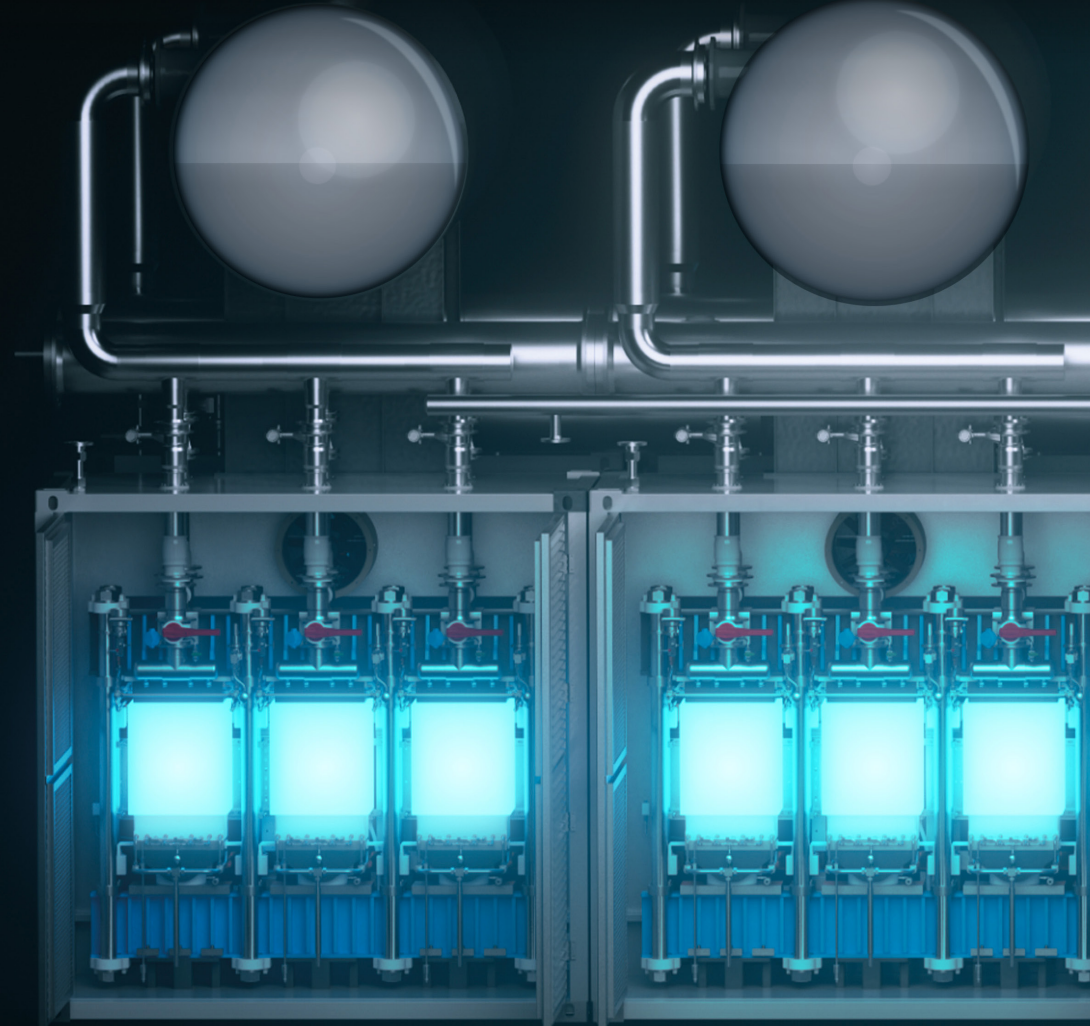
## CUTTING-EDGE 20MW MODULE FOR LARGE-SCALE PROJECTS

Our core electrolysis process module is engineered to incorporate real-world lessons learned from commercial projects. **POSEIDON** is a modular building block enabling scale up with optimised footprint. Suitable for both indoor and outdoor installation, it consists of skid-mounted units which can be pre-fabricated and pre-tested. This leads to reduced deployment times and low project costs.

Engineered to be safe, cost competitive and reliable.

CONTACT OUR SALES TEAM

[sales@itm-power.com](mailto:sales@itm-power.com)



REFINERIES



AMMONIA



METHANOL



TRANSPORT



SEMICONDUCTORS



STEEL



STORAGE



MINING

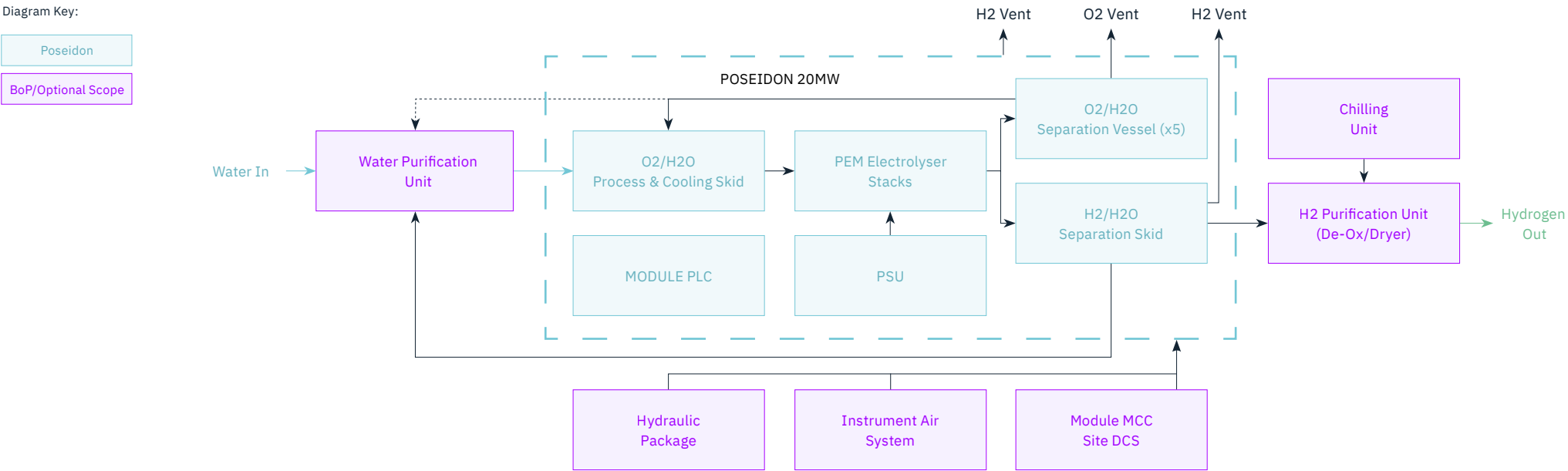


HEATING



ELECTRICITY

# POSEIDON: PROCESS FLOW & SPECIFICATIONS

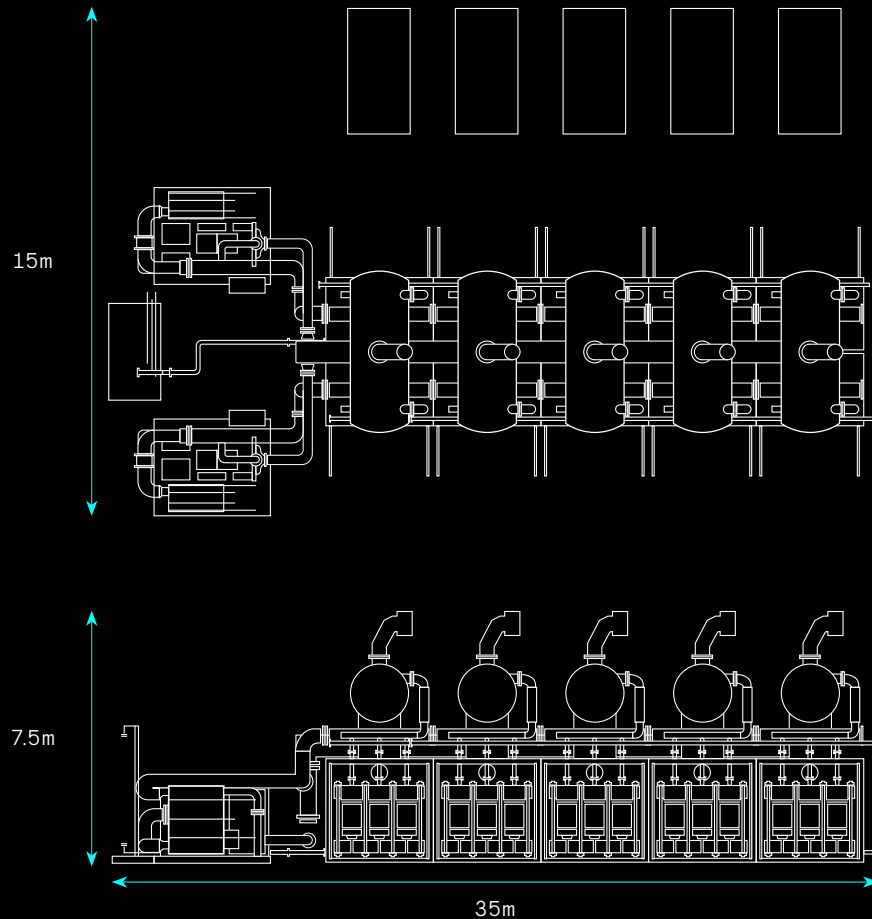


TECHNOLOGY	PEM
NUMBER OF STACKS	30
AC POWER CONSUMPTION	55.9 kWh/kg*
SYSTEM FOOTPRINT	35m x 15m x 7.5m (With PSUs & Access)
OPERATING RANGE	20%-100% (Based on 4 Pairs turned down to 25% applied load)
INPUT WATER PURITY	DI Water**

H2 PRODUCTION	360 kg/hr
H2 OUTPUT PRESSURE	31 bar(g)
H2 OUTPUT PURITY	Single Phase Fully Saturated with Trace O2
AMBIENT TEMPERATURE RANGE	-20°C/+45°C
MODULATION	10% per second ramp up 50% per second ramp down
COMPLIANCE	CE Marked/PED

\* This is the full system (water purification, stack, and BOP) energy consumption at beginning of life \*\*As per ITM Power Specification (D992-01-QUAL-011) – Input water post water polishing unit

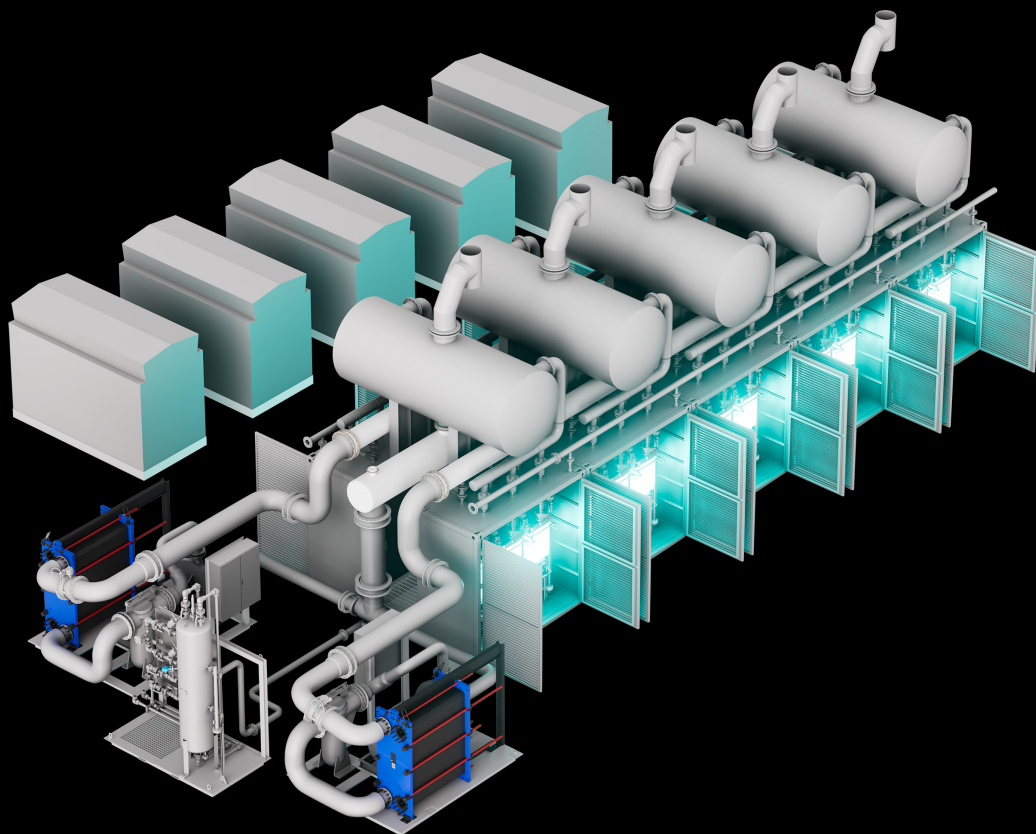
## CORE PRODUCT



- 10x TRIDENT Enclosure Units, each of these shall be supplied with:  
3x PEM Stacks, 1x TRIDENT Skid Frame,  
Gas Detection Equipment, Ventilation Fans
- 3x Power Supply Units (2x 40ft Container / 1x 20ft Container)
- 5x O<sub>2</sub> / Water Separator Vessel
- 2x O<sub>2</sub> / Water Processing Skid
- 1x H<sub>2</sub> Processing Skid: H<sub>2</sub>/Water Separator Vessel

Additional balance of plant scopes are available on request.

POSEIDON



Find out the detailed  
scope of supply and more  
on our product page

CONTACT OUR SALES TEAM

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[itm-power.com/products/poseidon](http://itm-power.com/products/poseidon)

