



NEPTUNE V

OUTPERFORMING. COMPACT. COMPETITIVE.

Best-in-class **NEPTUNE V** 5 MW Plug & Play Green Hydrogen Plant for mid-scale projects.

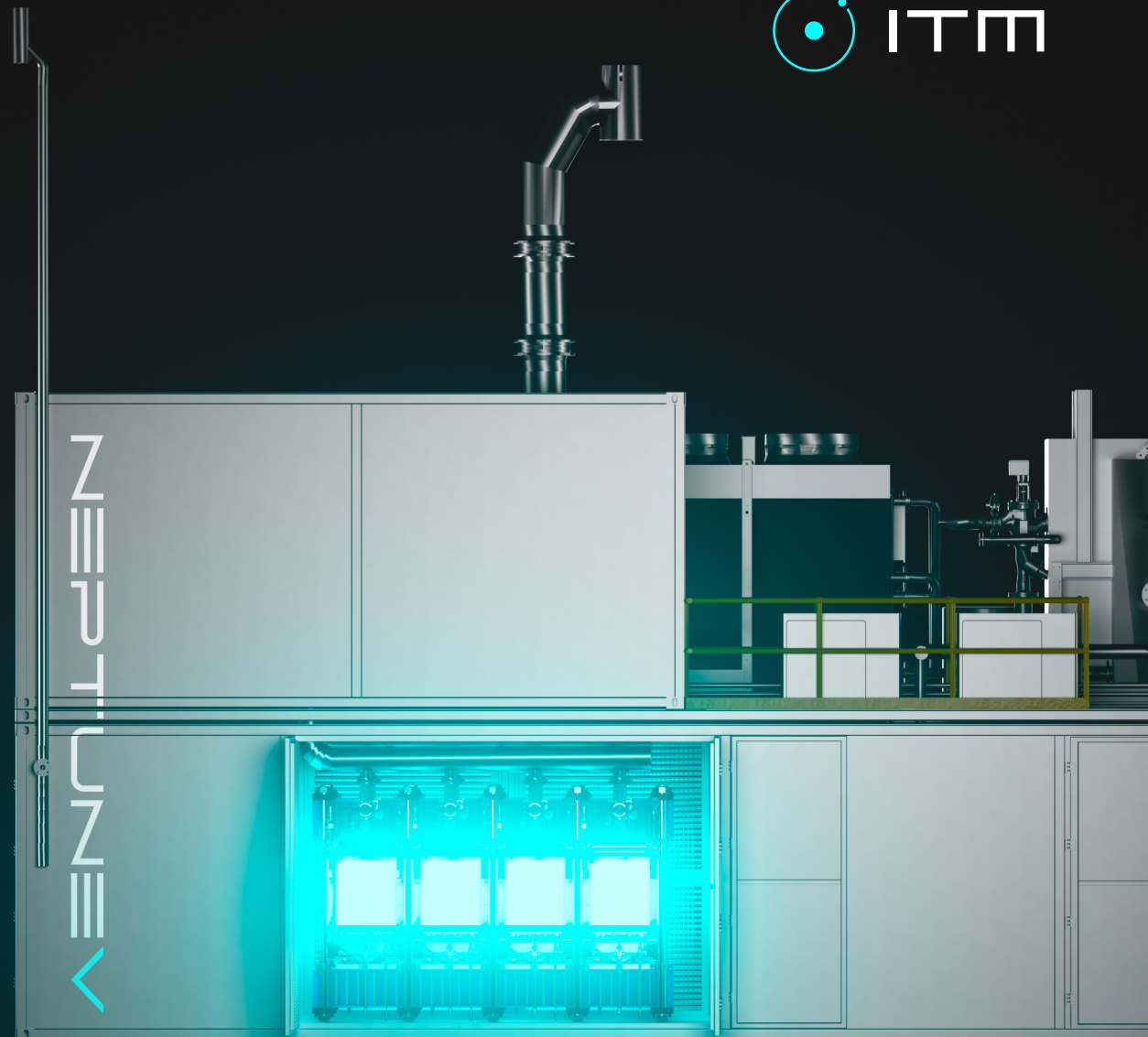
Designed against the highest safety and quality standards, and building on the learnings from our operational electrolyzers around the world, **NEPTUNE V** is our brand-new full scope 5 MW containerised green hydrogen plant, engineered to outperform.

Engineered to be safe, cost competitive and reliable.

CONTACT OUR SALES TEAM

sales@itm-power.com

EUR 5,000,000*



REFINERIES



AMMONIA



METHANOL



TRANSPORT



SEMICONDUCTORS



STEEL



STORAGE



MINING

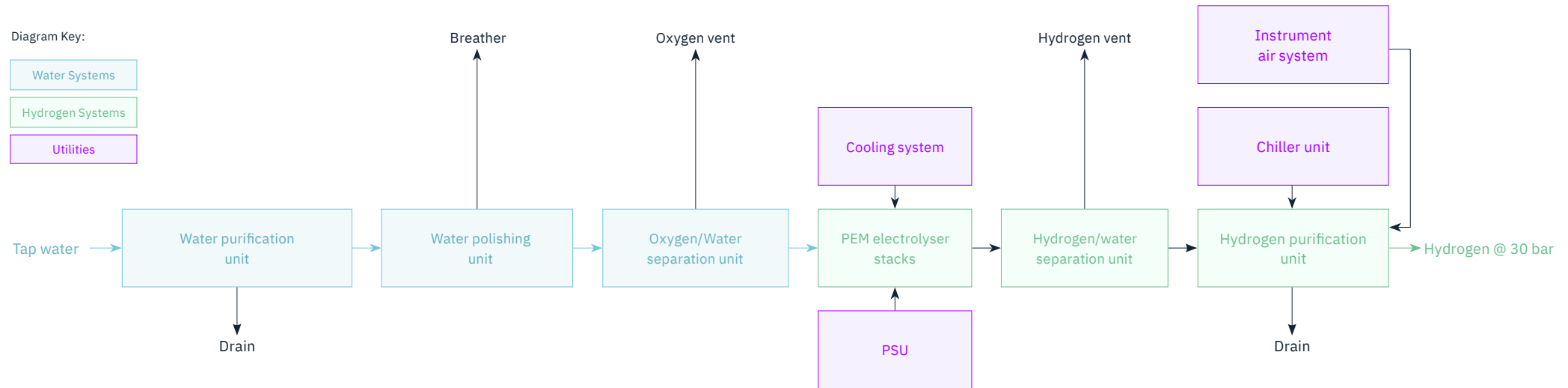


HEATING



ELECTRICITY

NEPTUNE V: PROCESS FLOW & SPECIFICATIONS



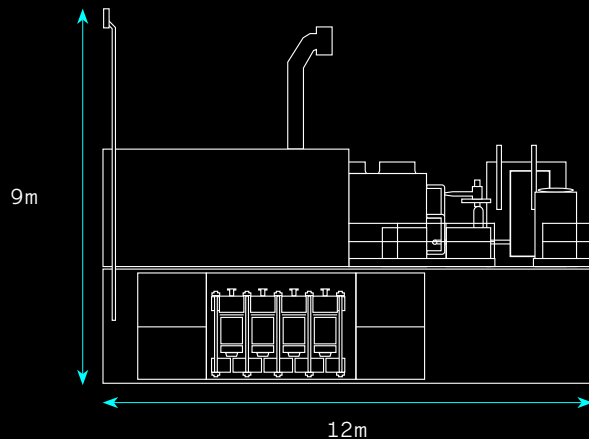
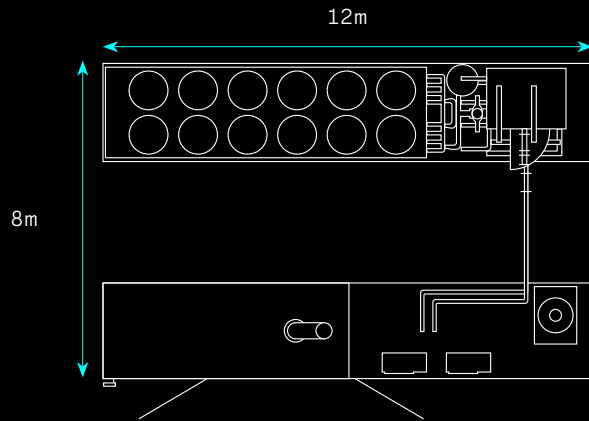
TECHNOLOGY	PEM	H2 PRODUCTION	90 kg/hr
NUMBER OF STACKS	8	H2 OUTPUT PRESSURE	30 bar(g)
CAPACITY	5MW	H2 OUTPUT PURITY	<5ppm H2O, <5ppm O2 (EN 17124 & ISO 14687)
AC POWER CONSUMPTION	55.9 kWh/kg*	AMBIENT TEMPERATURE RANGE	-20°C to + 45°C
SYSTEM FOOTPRINT	Approx. 96m ² optimised layout***	MODULATION	10% per second ramp up 50% per second ramp down
OPERATING RANGE	12.5–100%	COMPLIANCE	CE
INPUT WATER PURITY	Potable Water**		

* This is the full system (water purification, stack, and BOP) energy consumption at beginning of life

** Input water to the system, prior to purification

***Not including hazardous areas

AIR BLAST COOLER

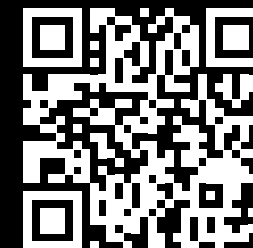
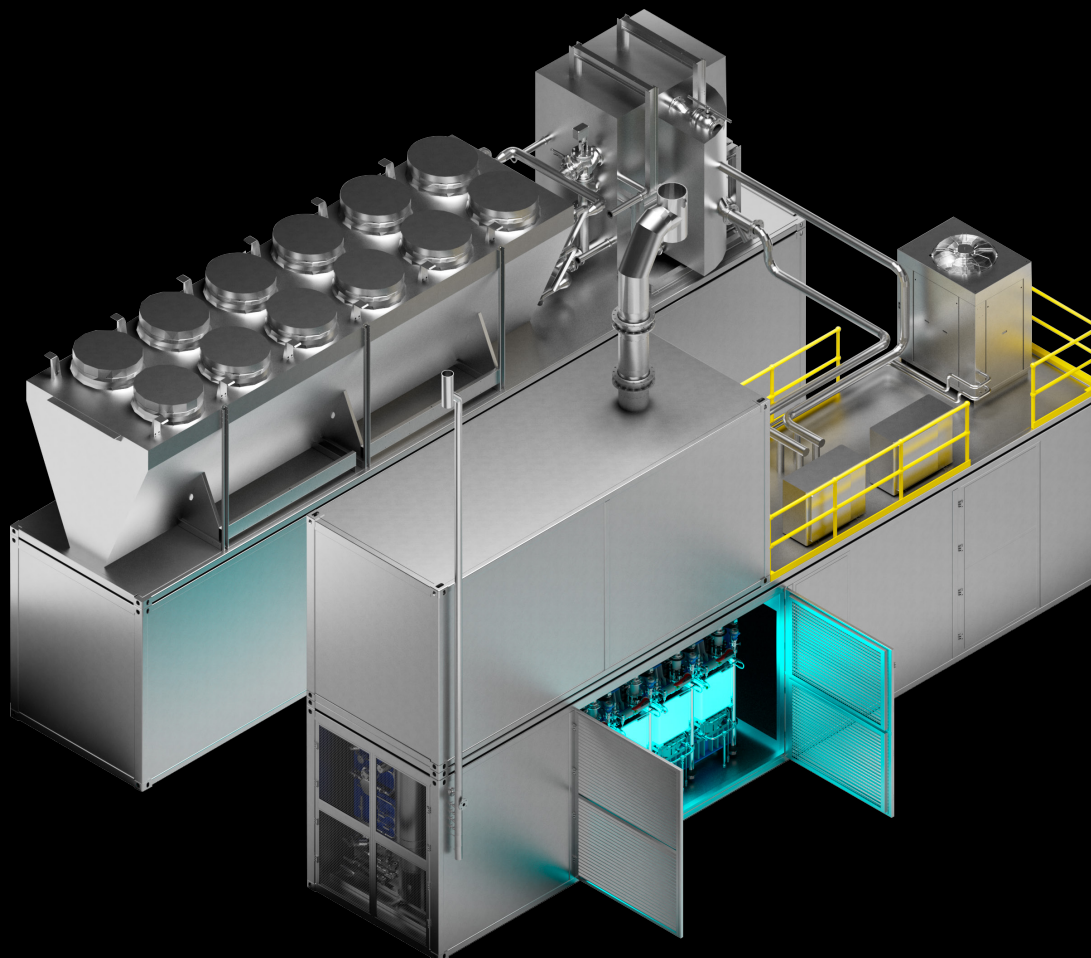


ELECTROLYSER

SCOPE OF SUPPLY

- Water purification unit
- Water polishing unit
- PEM stacks and skids
- Process water cooling system - adiabatic cooler
- Instrument air system
- Hydrogen purification unit
- Container temperature control
- Containerised power supply unit including; MV trafo, dual-rectifier and cooling system, specifically designed to match our electrolyser
- Siemens S7 PLC, integrated safety
- Local HMI for plant control and diagnostics
- Fully autonomous operating software system, able to connect to external SCADA or DCS
- All process and electrical interconnections within the container
- Factory Acceptance Test (FAT) before shipment

NEPTUNE V: PLUG & PLAY



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

CONTACT OUR SALES TEAM

sales@itm-power.com

itm-power.com/products/neptune-5

