Stationary Solutions

Fuel Cell Power Systems



Features ψ

36 x Advanced MEA PEM stacks

Advanced system controls - remote monitoring capability

Rapid start-up + dynamic response

Unlimited start-stop cycles

Low pressure air delivery system

No water required for humidification

No nitrogen required for shutdown

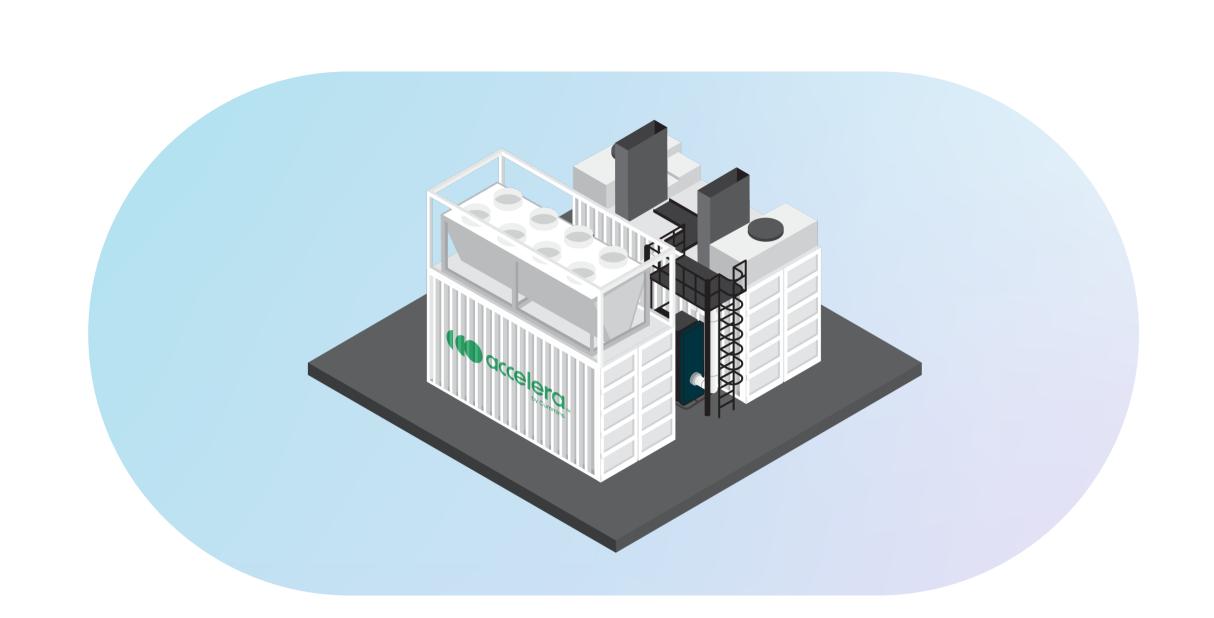
Plug + play design ready to accept H2 + output AC power

Robust + reliable



Fuel Cell Power Systems

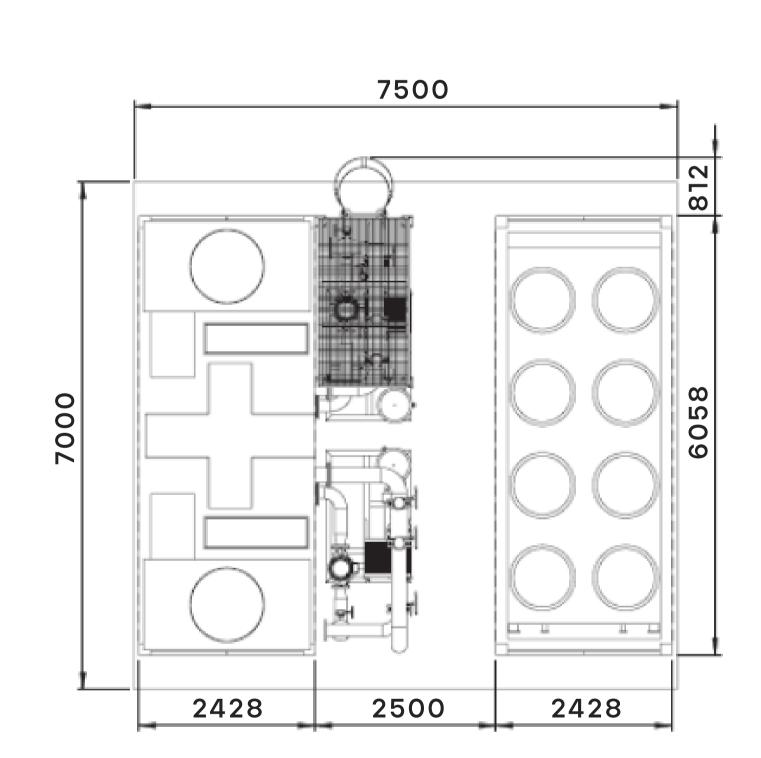
Scalable + Reliable Power

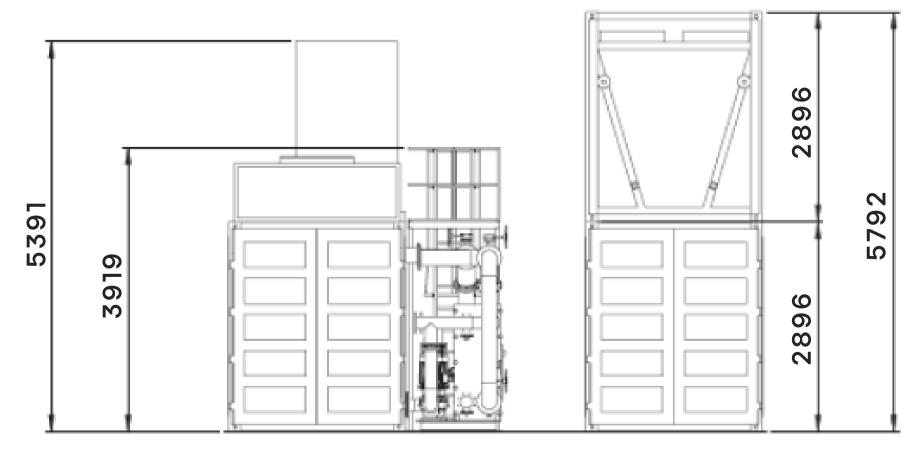


Benefits



- Proprietary PEM stack technology with high durability components designed for demanding conditions.
- Modular & scalable enables MW scale power plant deployments starting with a few hundred kWs.
- Integrated package allows for easy on-site installation, reduced construction time + costs.
- Trusted service support network provides rapid on-site predictive service to assure reliable power to critical applications.





Can deliver anything above 100kW in a similar package

Specifications

Power Ratings	1,440 kW (NP) ¹ , 1,000 kW (ESP) ² , 1,000 kW (LTP) ³ , 900 kW (PRP) ⁴ , 800 kW (COP) ⁵
Turndown [Partial Load] Ratio	100%
Ramp Rate	Black-start capable <180s (Off to full power ⁸) <30s (Hot-standby/Partial to full power)
Max Electrical Efficiency ⁶	50-55%
System Output + Frequency ⁷	3-phase AC power 50/60 Hz
System Design Life	20 Years+
Installation & Layout Options	Outdoor installation with 3 layout options
Approximate Weight (Total)	30 tons
Fuel Quality	ISO 14687
Inlet Fuel Pressure	10-20 bar(g)
Fuel Flow Rate ⁶	56-70 g/kWh
Ambient Operating Conditions ⁹	2-40 °C (-25) °C operation achievable with cold climate package

¹ Name plate; ² Emergency standby power (200hrs/yr; 24hrs continuous); ³ Limited time prime (500hrs/yr; 72hrs continuous); ⁴ Prime power (<4,000hrs/yr; load factor ~70%); ⁵ Continuous power (unlimited hrs/yr; base load); ⁶ Varies with operational profile;

⁷ Voltage determined by customer; DC output also available; ⁸ Without a battery energy storage system ⁹ hot and cold climate packages are available. Combined heat and power systems are available.