

H₂-power

Hydrogen Fuel Cell



Motive Power Systems

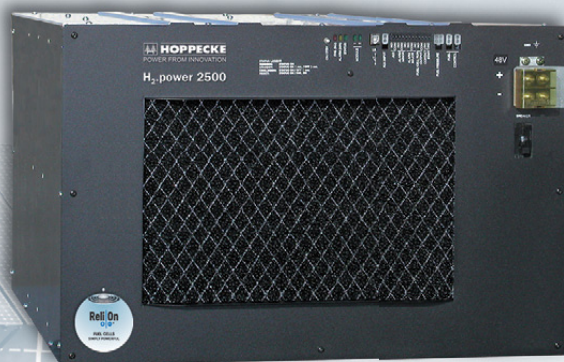
Reserve Power Systems

Special Power Systems

Service

Your benefits with HOPPECKE H₂-power

- **Highest project flexibility** - scalable design to support different ranges of backup energy
- **Best performance** - affordable extended runtime and simple maintenance
- **Reliable and safe operation** - outstanding self-diagnostic functions
- **Optimal environmental compatibility** - no emissions beside warm air and water

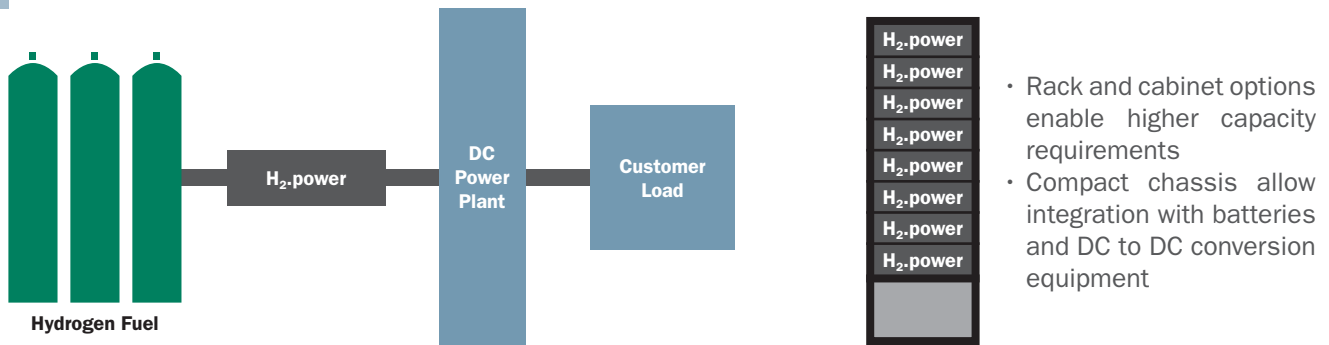


Similar to the illustration

Typical applications of HOPPECKE H₂-power

- **IT/Telecom**
BTS (base transceiver stations) for 3G and 4G wireless
- **Security and government sectors**
Tetra network
Surveillance security systems
- **Transportation**
Signals/Signs
Flight guidance systems

Functional diagram



Preliminary product specifications

		H ₂ .power 2500	H ₂ .power 1100	H ₂ .power 200
Physical	Dimensions	21.25" x 24" x 14" / 54.7 cm x 61 cm x 35.6 cm	17.25" x 24" x 7" / 43.8 cm x 61 cm x 18 cm	17.25" x 18.5" x 3.38" / 43.8 cm x 47 cm x 8.6 cm
	Weight	81 lbs/37 kg	58 lbs/26.4 kg	30 lbs/13.6 kg
	Mounting	23" rack mount (8 U)	19" or 23" rack mount (4 U)	19" or 23" rack mount (2 U)
Performance	Maximum power	2,500 W in single chassis/ Scalable to 20 kW in rack or cabinet	1,100 W in single chassis/ Scalable to 10 kW in rack or cabinet	12 & 24 V: 175 W/ 48 V: 150 W
	Rated current	0 to 104 A @ 24 V / 0 to 52 A @ 48 V	0 to 46 A @ 24 V / 0 to 23 A @ 48 V	0 to 15 A @ 12 V / 0 to 7.5 A @ 24 V / 0 to 3.7 A @ 48 V
	DC voltage	24/48 V nominal	24/48 V nominal	12/24/48 V nominal
Fuel	Composition	Standard industrial grade hydrogen (99.95%)		
	Supply pressure to unit	10 psig/69 KPag/0.69 bar operating	10 psig/69 KPag/0.69 bar operating	3.5 to 6 psig/24 to 41 KPag/ 0.24 bar to 0.41 bar
	Consumption	34.2 slpm @ 2,500 W	13.4 slpm @ 1,000 W	3 slpm @ rated power
	Hydrogen Storage Capacity	n/a (modular storage solutions available from 2.5 kWh to 300 kWh)		
Operation	Ambient temperature	35 °F to 122 °F / 2 °C to 50 °C Optional -40 °C to 50 °C in hardened outdoor cabinet		
	Relative humidity	5-95% non-condensing	5-95% non-condensing	0-95% non-condensing
	Altitude	-197 ft to 13,800 ft/-60 m to 4,206 m		
	Location	Indoors or hardened outdoor cabinet		
Safety	Compliance	CSA, NEBS and CE Pending		
Emmissions	Water	Max 25 mL/kWh	Max 25 mL/kWh	Max 6 mL/175 W
Monitoring/Control	Remote	System configuration & status/Historical & operational data		
	Communications	Standard: USB/Dry contact; Optional: Front panel display/ Ethernet/SNMP Wireless modem – CDMA/ GSM	Standard: USB/Dry contact; Optional: Front panel display/ Ethernet/SNMP Wireless modem – CDMA/ GSM	Standard: USB/Dry contact