

# Stationary system for power generation ●

Blue World Technologies' stationary system is a methanol fuel cell-based stationary power generator specially developed for the power demand and features of the telecommunication industry. Suitable for outdoor installation in various environmental conditions.

Our stationary system is based on HTPEM (High-Temperature Proton Exchange Membrane) technology. As a result, there is no need to purify the hydrogen after the methanol-reforming process. With this concept, the process is simplified and has superior electrical efficiency.

It works in parallel with an existing onsite 48V battery solution and replaces diesel generators for backup, supplementation, and off-grid power.

The system can be used in hybrid applications along with power grid and renewable energy sources such as solar and wind turbines.



**Pure methanol system**



**Modularity (5-10-15 kW)**



**True continuous power**



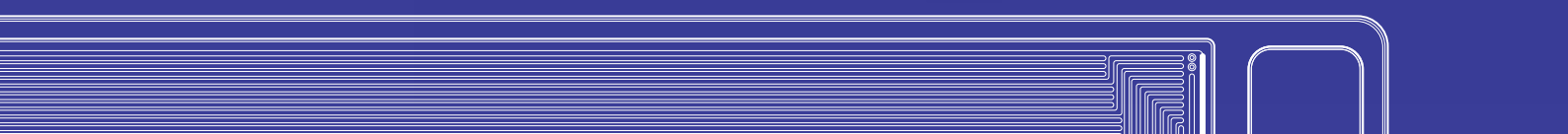
**Reduced emissions**

2 x module 5k

Base

## SYSTEM FEATURES

- **Split fuel:** Pure methanol with option for onsite water production
- **Low-noise power generator:** 65 dB
- **Low maintenance:** Easy access, active service alerts, remote monitoring
- **Small footprint:** 1.1m<sup>2</sup> for 5-10-15 kW
- **Fleet management services:** OEM/customer network, 24/7 cloud based monitoring, IoT, and remote connection



Performance	Value
Voltage range	-38 VDC to -60 VDC
Max power output [1]	5 kW, 10 kW, 15 kW
System efficiency [1]	38 – 40%
Design life - operational	10,000 hours
Start-up time	15-20 min
Run time at rated power [2]	64 hours (5 kW), 32 hours (10 kW), 21 hours (15 kW)

[1] At the beginning of product life. [2] An external tank connection port is available to increase the backup time.

Fuel characteristics	Value
Fuel consumption	0.55 L/kWh of methanol and 0.36 L/kWh of water [3]
Fuel capacity [2]	320 kWh of onboard fuel storage capacity
Fuel type	Methanol (IMPCA reference standard) and DI Water (ASTM Type 1)

[2] An external tank connection port is available to increase the backup time. [3] Optional condenser to reach water neutrality.

Communication	Value
External interfaces	IPv6, Mobile app (Bluetooth), Remote access [4], LAN, CAN Open, FOTA, SD card, Dry contacts, SNMP V3[1], IoT [4]
Display	LED indicators for status and 7-inch HMI display [4]

[4] Optional features and services.

Standard	Value
Designed according to	CE, IEC 62282-3-100, IEC 61508 SIL 2, IEC 62368-1
Seismic rating	IEC 60068-3-3, Seismic Zone 4

Physical attributes and environment	Value
Operation temperature [5]	-10°C to 50°C
Altitude	Up to 2,000 m
Relative humidity	0 - 95 %
Sound level	65 dB @ 1 m
IP rating	IP54
Location	Outdoor [6]
Physical dimension	845x1433x1354 mm (5 kW) 845x1433x1804 mm (10 kW) 845x1433x2254 mm (15 kW)
System weight	530 kg (5 kW) 780 kg (10 kW) 1030 kg (15 kW)

[5] Cold climate solutions are available upon request.

[6] Indoor with special requirements.

## CONTACT

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