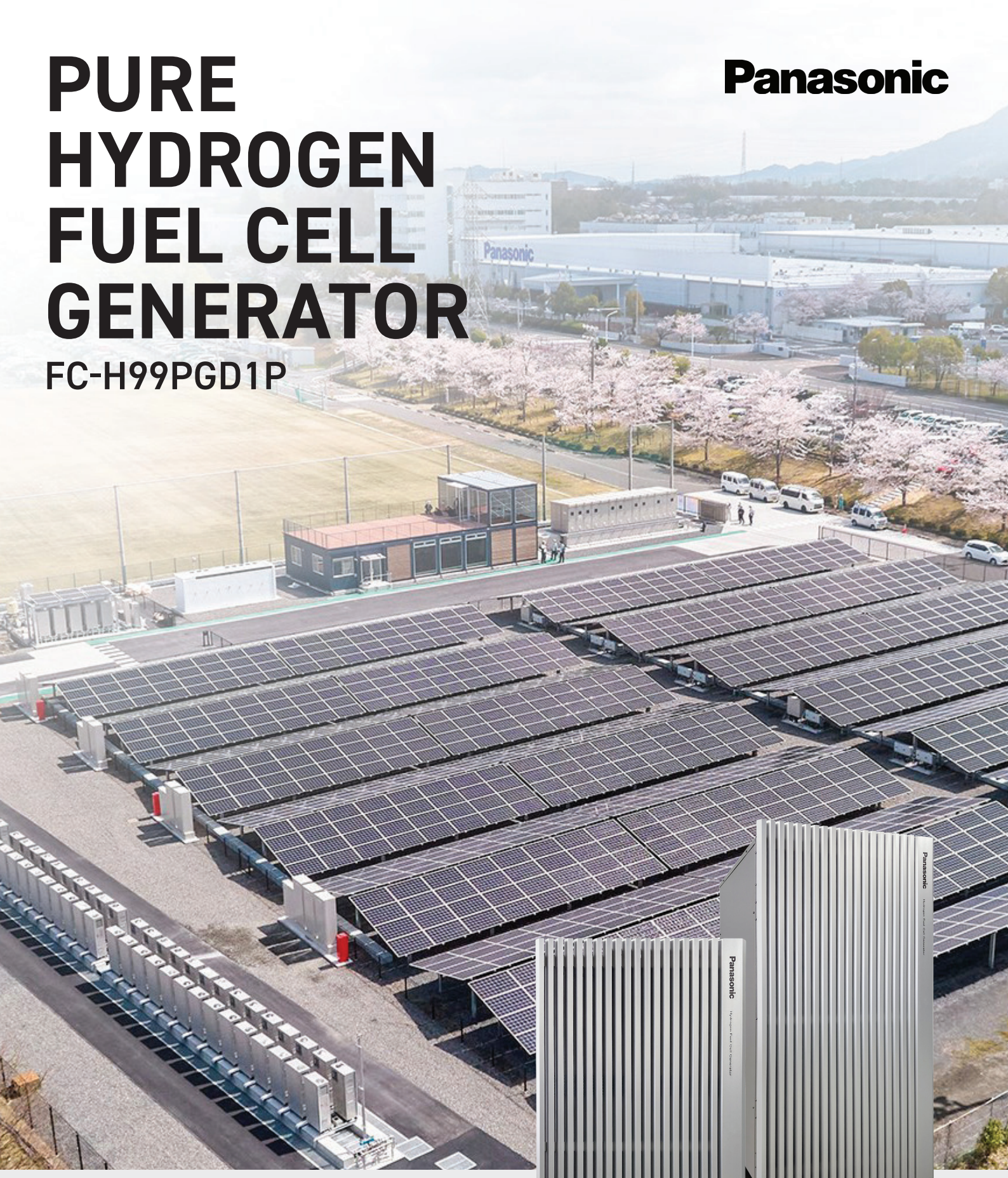
PURE HYDROGEN FUEL CELL GENERATOR

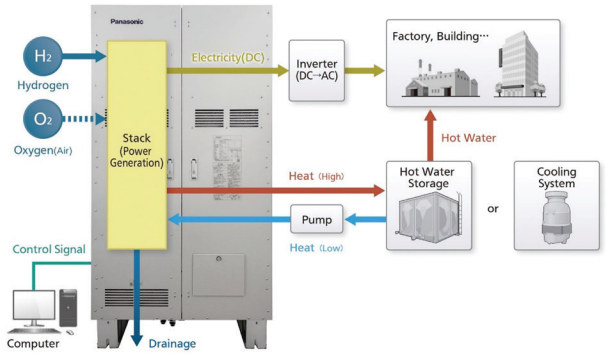
FC-H99PGD1P

Panasonic



The Panasonic PH3 offers a flexible and scalable platform for various commercial and industrial uses in Australia. It generates 10kW of DC power and approx. 8.2kW of heat. Up to 250 modules can be connected for adaptable use across various environments. It operates efficiently with reduced hydrogen usage, extending operational longevity and lowering costs.

SCAN FOR ADDITIONAL PRODUCT INFORMATION

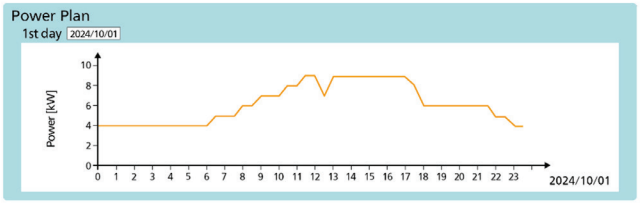


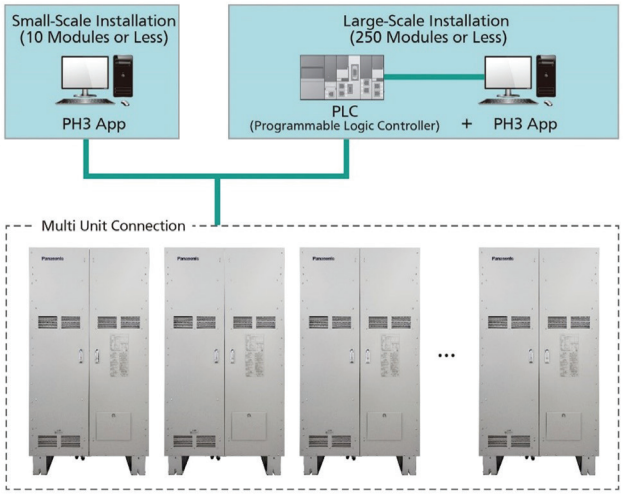
COGENERATION SYSTEM WITH A MAXIMUM 10KW OF DC POWER OUTPUT

A pure hydrogen fuel cell generator PH3 can generate a maximum of 10kW of DC power, as well as approximately 8.2kW of heat through a chemical reaction between high-purity hydrogen and oxygen in the air. By connecting a hot water storage to the product, heat generated from the fuel cell can be converted into hot water (approx. 60°C) for use in a factory or building.

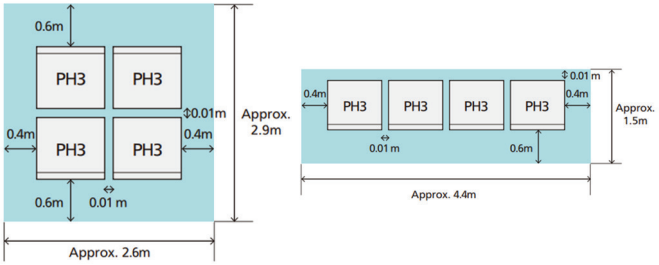
MULTIPLE 10KW MODULES CAN BE CONNECTED

By using the dedicated PH3 app, the power output can be adjusted in 1kW increments between 4kW and 10kW per module. Since up to 250 pure hydrogen fuel cell generators can be connected, flexible power generation plans can be formulated for factories and buildings where various types of demand fluctuations are expected.





			PH3 (DC type)
Product name			Pure Hydrogen Fuel Cell Generator "H2 KIBOU"
Type of fuel cell			Polymer electrolyte type (PEFC)
Model number			FC-H99PGD1P
Year and month of release			December 2024 (planned)
Design panel			Optional product (separately sold)
Configuration			Cogeneration system (external water-cooling system)
Basic performance	Output	Power	10kW max.
			Adjustable in 1kW increments between 4 and 10kW
		Voltage	DC 380-495V
			(Fixed Voltage)
	Power Consumption	During startup	300±90W
		Freezing prevention	583W
	Efficiency	Power generation	LHV: 57%, HHV: 48.1%
		Heat recovery	LHV: 47%, HHV: 39.7%
	Hydrogen	Consumption (NL/min)	97.5NL/min ≈ 6Nm³/h
			103.7NL/min (Max)
		Supply pressure	50±20kPa
	Exhaust Heat	Output	8248W
		Water-cooling device	Water-cooling equipment is required
			(external procurement)
		Supporting cogeneration	Hot water storage unit (external procurement)
	Time	Startup	30sec (approx. 40sec to achieve the rating)
		Continuous power generation	168hours (7days)
	Dimensions	Main unit (mm)	900mm x 865mm x 1787mm
			900mm x 898mm x 1787mm (with a design panel)
		Packaging (mm)	957mm x 966mm x 1917mm
	Weight	Dry	340kg
			354kg (with a design panel)
	Control	Up to 10 units*1	PH3 app (provided with the main unit)
		Up to 250 units (with PLC)*2	(The app is not required during EMS connection)
Installation conditions	Maximum altitude for installation		1,000m
	Maintenance space		Front maintenance: 600 mm, Other: 10 mm *3,4
	Installation environment temperature		-15 to 40℃



HIGHLY-FLEXIBLE INSTALLATION FACILITATES PROPOSALS TO A WIDE RANGE OF CUSTOMERS

The PH3 can be installed even in small spaces, since the maintenance access points are located in the front*. It can also be provided to a wide range of customers as it is resistant to cold (lower limit: -15°C), as well as high altitude (1,000m).

Since installation regulations differ depending on the country, please confirm them before installation.

*1: The computer used to install the app must be provided by the customer. The computer and fuel cell unit must be connected via LAN.
*2: The computer and PLC used to install the app must be provided by the customer. The computer and PLC, as well as the PLC and fuel cell unit, must be connected via LAN (hub relay).
*3: On the side of the front face of the main unit, a 400mm space is required for the door.
*4 : In case of attaching a design panel, a 70mm space is required for left and right sides.

Performance specifications are subject to change.
Please confirm with your local Panasonic representative

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