

# PERFORMER SERIES

## P250i FUEL CELL

*WHEN POWER MATTERS!*



### FEATURES

- RELIABLE
- EFFICIENT ACROSS OPERATING ENVIRONMENTS
- CONFIGURABLE TO APPLICATION BATTERY CHEMISTRY AND VOLTAGE
- SIMPLE INSTALLATION AND OPERATION
- SIGNIFICANT POWER SAVINGS WHEN PAIRED WITH SOLAR AND/OR WIND
- REMOTE SYSTEM MONITORING, NOTIFICATION, AND DATA LOGGING

### RELIABLE POWER

The P250i Solid Oxide Fuel Cell power system is designed to provide reliable backup power to your new or existing power system.

The ideal backup power source for critical applications, the P250i integrates seamlessly with grid, generator, wind, or solar technologies. The P250i provides the assurance and peace of mind that your critical application will continue to operate during extreme circumstances.

The P250i electrochemically converts propane or natural gas fuels into electrical power. The fuel cell needs no oil changes, has no major moving parts, and requires no maintenance cycles. This means the P250i is capable of providing reliable backup power after years of zero maintenance.

### SYSTEM DESCRIPTION

The P250i system utilizes voltage sensing leads and a remote temperature probe to detect the actual battery voltage and temperature. This information is used to determine optimal charging and discharging battery voltages. The result: maximum use of battery capacity, life, and system safety. These values can be adjusted to accommodate any battery chemistry.

The P250i can be added into existing infrastructure with minimal effort, or it can be included in new installations. The system is designed to integrate with batteries, solar charge controllers, DC-DC converters, fused external communications, computers, modems, and other customer electronics. We also provide engineering support to maximize the life-cycle cost for each application.

### APPLICATIONS

- Rail signals and controls
- Remote security
- Traffic monitoring and management
- Telecommunications
- Weather stations
- Data collection and monitoring
- Pipeline monitoring and protection
- LiDar
- SCADA



## TECHNICAL DATA

### POWER

Continuous Charge Power	250 W
Operating Voltage	12-24 Nominal VDC
Nominal Charging Current	20 - 10 A
Fuel Efficiency (LHV)	20%
Standby Power Draw	<0.05 W
Design Target Life	250 Cycles / 3,000 Hours

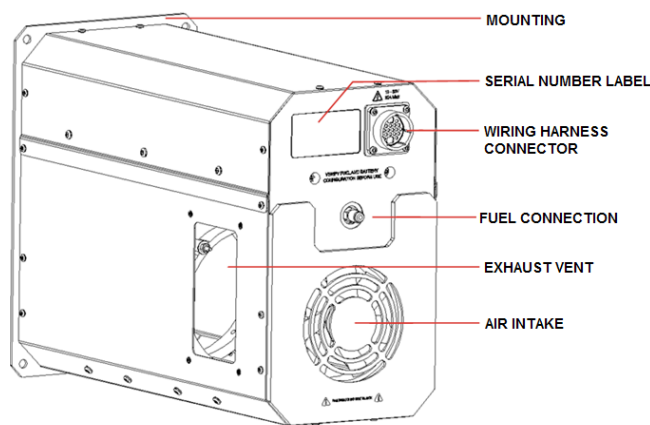
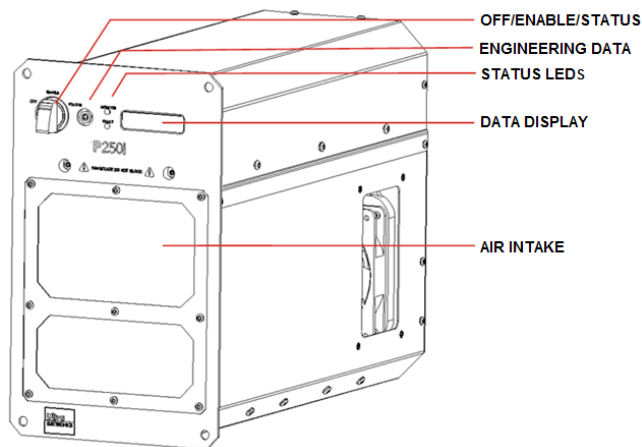
### ENVIRONMENTS

Operating Temperature	-40 to 50° C
Storage Temperature	-65 to 71° C
Humidity	0%-95%* RH
Operating Altitude	Up to 10,000 ft

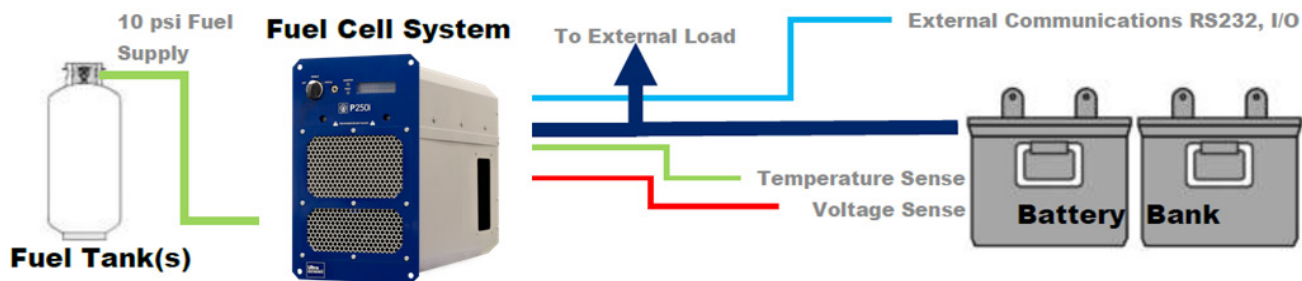
### OPERATION

Weight	23.5 lbs / 10.7 kg
Dimensions	13" H x 17" L x 7" W
Noise	40 dB (A)
Engineering Data	Serial RS232 9600 8N1
Data Display	VFD
Fuel Consumption LPG	0.25 lbs/hour
Fuel Consumption CNG	3.27 m <sup>3</sup> /day

\*non-condensing



## EXAMPLE APPLICATION CONFIGURATION



making a difference

Ultra Electronics  
 USSi - Fuel Cell Products  
 5500 South State Road  
 Ann Arbor  
 Michigan, 48103  
 USA  
 Tel: +1 734-302-7632  
 Email: sales@ultra-ussi.com  
 www.ultra-ussi.com  
 www.ultra-electronics.com

Ultra Electronics reserves the right to vary these specifications without notice.  
 © Ultra Electronics Limited 2015.  
 Printed in USA  
 P/N 90187A-PDS-P250i Rev A