

# E-2500 Hydrogen Fuel Cell



## Features

- Modular, fault-tolerant design
- Scalable for higher capacity applications
- Self diagnostics for optimal performance
- Multiple bus / Multiple voltage site solutions
- Indoor shelter 23" rack mount and outdoor cabinetized configurations

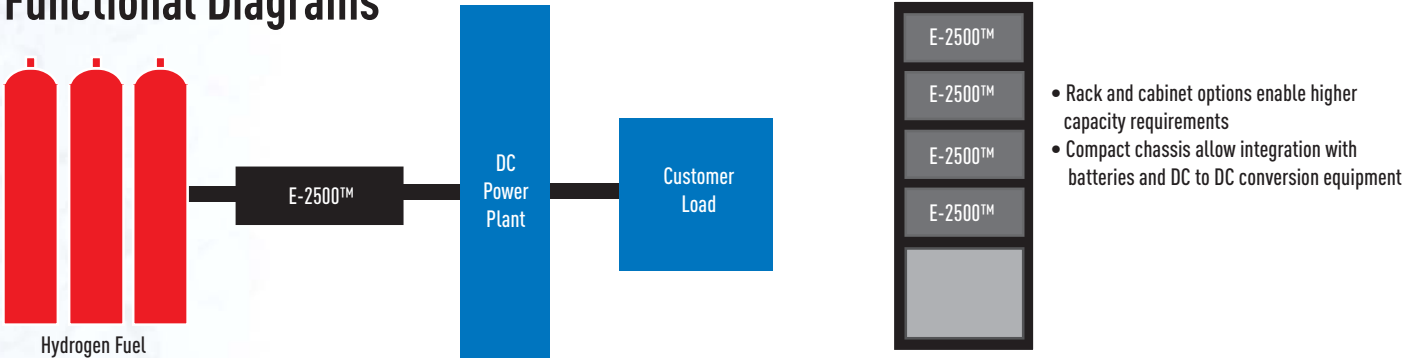
**Reli On**  
+ -<sup>®</sup>

The E-2500™ hydrogen fuel cell - efficient, compact, environmentally responsible energy. Designed for backup power applications within the telecommunications, transportation, security and government sectors, the E-2500™ fuel cell system provides DC power for equipment needing up to 2,500 Watts in a 8U rack-mount chassis. Multiple systems may be combined for higher power applications and N+1 redundancy. The E-2500™ system is fueled by hydrogen and can affordably provide highly reliable extended runtime for critical equipment. Because the only emissions are warm air and a small amount of water, the E-2500™ is exempt from the most stringent air quality standards and is a valuable component in corporate sustainability efforts.

Fuel Cells

Simply Powerful

## Functional Diagrams



- Rack and cabinet options enable higher capacity requirements
- Compact chassis allow integration with batteries and DC to DC conversion equipment

The E-2500™ fuel cell system is well suited for applications like the following:

3G and 4G wireless  
 Wireless backhaul/T1/Fiber/Microwave  
 Transportation (Signals / Signs)  
 P25 / Tetra  
 SCADA  
 Disaster response / First Responder

Microwave communications  
 Radio/Repeater sites  
 Flight guidance ILS  
 Surveillance / Security systems  
 Broadband DLC

## Preliminary Product Specifications

|                      |                           |  |
|----------------------|---------------------------|--|
| Physical             | Dimensions (w x d x h)    | 21.25" x 24" x 14" / 54.7 cm x 61 cm x 35.6 cm   |
|                      | Weight                    | 116 lbs / 52.6 kg  |
|                      | Mounting                  | 23" rack mount (8U)  |
| Performance          | Maximum power             | 2,500W in single chassis / Scalable to 20kW in rack or cabinet   |
|                      | Rated current             | 0 to 104A @ 24V / 0 to 52A @ 48V   |
|                      | DC voltage                | 24 / 48 V nominal  |
| Fuel                 | Composition               | Standard industrial grade hydrogen (99.95%)  |
|                      | Supply pressure to unit   | 10 psig / 69 KPag / 0.69 bar operating   |
|                      | Consumption               | 34.2 slpm @ 2,500W   |
|                      | Hydrogen Storage Capacity | n/a (modular storage solutions available from 2.5kWh to 300kWh)  |
| Operation            | Ambient temperature       | 35°F to 122°F / 2°C to 50°C<br>Optional -40°C to 50°C in hardened outdoor cabinet  |
|                      | Relative humidity         | 5-95% non-condensing   |
|                      | Altitude                  | -197 ft to 13,800 ft / -60m to 4,206m  |
|                      | Location                  | Indoors or hardened outdoor cabinet  |
| Safety               | Compliance                | CSA, NEBS and CE Pending   |
| Emissions            | Water                     | Max 25mL / kWh   |
|                      | Noise                     | 72 dBA @ 3.23 ft / 1m  |
| Monitoring / Control | Remote Communications     | System configuration & status / Historical & operational data<br>Standard: USB / Dry contact<br>Optional: Front panel display / Ethernet / SNMP<br>Wireless modem - CDMA / GSM |

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