



# Application example-Fuel cell Battery chargers.



- Market Segment: **Industrial.**
- Applications:
  - 1) **Liquid Fuel Cell** that operates as a **battery charger** for a wide variety of **stationary applications**, including **wireless base stations**.
  - 2) **Liquid Fuel Cell** that operates as an **on-board battery charger** for a wide variety of vehicles in the **materials-handling industry** (pallet jacks act..)
- DC/DC Requirements:

Input: **9-36VDC** : The Fuel cell output voltage is the input source

Outputs:

  - 1) **48V/~2KW** to maintain the charge on the 48 V battery for the material handling vehicles applications.
  - 2) **53V/~2KW** to maintain the charge on the 53V battery for the stationary applications.
- **Designed in Calex FXP 1000W series :**
- <http://www.calex.com/pdf/fxp.pdf>
- **24S48.21FXP** x 2 modules in parallel.
- **24S53.19FXP** x 2 modules in parallel.
- Replaced VICOR 600W bricks (3 in parallel), because of better power density, better efficiency and price.