

# 150 KW HYDROGEN POWERED MICROGRID



KCE's mobile microgrid provides clients 150 kW's of power with no local emissions or grid connection.

On-site hydrogen production and fuel cells are used to <u>produce electricity</u> for EV charging and power generation.

A 5k gallon atmospheric fuel tank provides 36 MWh of energy.

The microgrid meets NFPA 2 requirements and can also support H2 fueling demand.

## BETTER SOLUTION THAN YOUR DIESEL GENERATOR...AND CLEAN

LOW OPERATIONS COST

**CUSTOM AND SCALABLE** 

**NO LOCAL EMISSIONS** 



Fuel costs of ~\$2.00 gallon

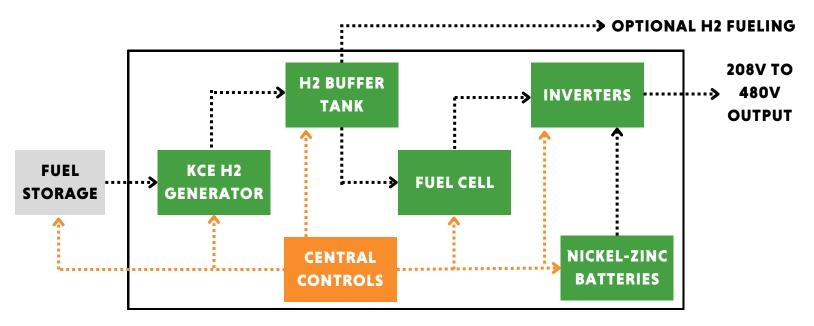


Only pay for power you use



Eliminate harmful emissions

## **HOW IT WORKS**



### **EQUIPMENT**

KCE H2 Reformer	230 kg/day
Low Pressure Buffer Tank	120 Gallons

Fuel Cell Module 185 kW Capacity

**Battery Module** 48 to 96 kWh (Safe, Sustainable Nickel-Zinc)

**Inverters**208 - 480V 3-Phase Output **5K Gallon Liquid Fuel Tank**Holds 36 MWh of Energy

#### **PERFORMANCE**

**Hydrogen Quality** Fuel Cell Grade: ISO (14687:2019)

**Net Power** 50 to 150 kW Consistent

Max Power ~300 kW w/ Batteries

**Power Required** Grid Independent or 20 kW

Per kg H2 Fuel Consumption 2.4 gallons methanol and 1.2 gallons of water

**Local Emissions** No NOx, SOx, or Particulates

## SAMPLE LIST OF SAFETY AND COMPLIANCE

General Guidelines NFPA 2

**Hydrogen Reformer** ANSI / CSA FC5 (Similar to ISO 16110-1-2007)

**Process Piping** ASME B31.3, B31.12, and Section 8 VIII

**Buffer Tank** CGA Publication PS33

**Fuel Cell** IEC-62282-5-100 & -500

H2 Venting NFPA 2, 853, 54, & GCA Publication G5.5