



Emergency response radios powered by hydrogen-based fuel cells

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The Jadoo Power Systems, Inc. (Jadoo Power) hydrogen-based fuel cell power systems consisting of the NABII power unit, N-Stor fuel canister and FillPoint refill station are ideal for use with a variety of applications, including field-ready laptops, emergency response radios and other equipment used in mission critical "off-grid" power situations, as well as professional broadcast cameras. Safety was a critical design criterion for Jadoo when developing the components of the power system.

The N-Stor canister, which is central to Jadoo's product line, stores hydrogen absorbed in a metal hydride powder. The patented valve and digital interface design of the N-Stor fuel canister allowed Jadoo to receive the only DOT exemption for air cargo transportation. Rigorous qualification and acceptance safety testing was required in order to receive the DOT approval.

In accordance with 49CFR, the canister valves and relief devices were subjected to burst, cycling, crush, high/low temperature, leakage, activation, extrusion, and bonfire testing. In addition to the testing completed for the exemption, Jadoo implemented a series of internal product safety tests. These extended tests included: valve & interface cycling as well as drop, immersion, shock and vibration tests.