

3/29/2010

To Whom It May Concern,

Below are several comments as requested regarding the subject project. UPS Definition Clarifications:

What is a rotary UPS? A rotating machine feeding the load – ROTARY UPS

What is a static UPS? A static inverter feeding the load – Static UPS

A battery is an energy store.

A flywheel is an energy store.

Any UPS can be with or without Diesel.

“In a Rotary UPS, during all modes of operation, the load is fed directly from a synchronous generator or motor generator .....Hence, the distinction between a static and a Rotary does not lie in the use of batteries or flywheels as a short-term emergency power source; rather it is based on the method through which the output power is derived”

2008 Frost and Sullivan

Furthermore, in a rotary UPS, during all modes of operation, the load is fed directly from a synchronous generator or motor generator. During a power failure or an interruption of the mains supply, the generator is fed by an emergency power source (batteries, fuel cells or flywheel systems). In line-interactive systems this is a direct feed, and in online UPS systems this is a feed to the generator through an inverter. For long-term support, the rotary UPS may use a diesel generator in exactly the same way as a static UPS, that is, the inverter may obtain its energy from a diesel generator. Alternatively, some manufacturers offer a line interactive UPS systems with a diesel engine directly coupled through a clutch.

Please contact me with any questions.

Regards,

**Kyle F. Burak**

Director - Sales & Marketing

Piller USA, Inc.

45 Turner Drive

Middletown, NY 10941-2047

USA

[www.piller.com](http://www.piller.com)