

Louisville KY, USA – Electronic Design & Research Inc. just shipped a new type of Power Distributing Relay rated at 220VAC/50A (11kW) that was designed to copy with technical challenges providing a power to a load from one of two power sources, a power line (grid) and back-up power source (generator) to a customer in Australia for field tests. It is an Intelligent Sustained Switch (iSUPS-220/50, P/N EDR84080) requiring no additional power source for normal operation, self-contained, or any external commands to function. The iSUPS starts functioning instantly, once any power source is connected to any of its input terminals and the common (GND). The iSUPS possesses “intelligent” signal processing, real-time making decisions of switching a high-power from a failed to a reliable power source “instantly” (lesser than microseconds) exploiting specifics of the fuzzy-logic SPDT&N relay having a tri-state output.

Essentially, the iSUPS-220/50 consists of two parts: a high-power with a fuzzy-logic input f-logic SPDT&N Solid-State Relay (T7G500A50/12, P/N EDR84081) and a universal control board (EDR84900). The f-logic SPDT&N relay belongs to a family SPDT&N relays varies by rated maximum voltages and currents. An iSUPS for 10A or 1000A assembled with the same control board and only the f-logic SPDT&N varies. The universal control board provides flexible or “intelligent” decision-making capabilities. More specifically, it provides overlapping multi-feedbacks capable of changing the outcome if the input condition meanwhile got better or started deteriorating more rapidly. The control board and any f-logic SPDT&N relays are easily interfacial thus simplifying creating a family of iSUPS-VV/CC devices varying at rated powers (voltages and currents). The iSUPS-VV/CC could work with either synchronized or independent power sources. It is essential for commutating a power from a DC/AC generator powered by energy from solar or fuel cells. Production is planned to start in October of 2011. Project cost is \$860 ea/250. For more information, please email us INFO@VSHOLDING.COM

