Power source meets needs of automated utility substations

Behlman Electronics has announced a major breakthrough in the quality and reliability of the electrical power available to support the operation of Automated Utility Substations, with its new INV-2500 Inverter.

THE PROBLEM

Fully Automated Utility Substations have entered a period of unprecedented growth. For example, according to a leading study on the subject, the number of fully automated Electrical Utility Distribution Substations will more than double between 2011 and 2013.

To fully automate a substation, utilities must install a wide range of intelligent electronic devices such as digital protective relays, remote terminal units, programmable controllers, and high-speed computer systems utilizing Supervisory Control and Data Acquisition (SCADA). All such intelligent electronics need to be supplied with very clean, reliable AC power and cannot tolerate even the briefest loss of AC power without disrupting utility services.

To assure uninterrupted power for their customers, utility substations use banks of batteries providing either 48-, 125-, or 250-VDC as a power source, along with inverters that convert the DC power to the AC power need by the intelligent electronic devices. Unfortunately, conventional inverters are typically power factor

derated, with each watt equal to only about 0.65 VA, and they often provide inadequate modified sine waves.

THE BEHLMAN SOLUTION

The new Behlman INV-2500 Inverter is not power factor derated, so it can supply full power into any power factor load. As a result, the Behlman INV-2500 converts the DC current from the batteries into the clean, regulated AC power essential to keep the intelligent electronic devices operating at peak performance.

According to Ronald Storm, President of Behlman Electronics, “We have made a major commitment to the Electric Utilities Industry, by creating a power supply that will meet their automation needs today and well into the future. Our INV-2500 Inverter provides an easy and economical upgrade path that will help utilities operate at peak efficiency with the greatest economy, wherever AC power is needed from a DC source.”

The Behlman INV-2500 Inverter is 7” (4U) high and fits into a standard 19” rack. It is available with an optional AC input that will run the load from the AC mains and switch to the battery input if the AC power is lost.

Complete specifications for the Behlman INV-2500 Inverter are available on line at www.behlman.com/inverters.htm [1].

Cost is $4,795 in small quantities and delivery is 30 days ARO.

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Links:
[1] http://www.behlman.com/inverters.htm