

DIMO Field Wiring Terminals offer Western U.S. Utility Power Redundancy

THE POWER REDUNDANCY CHALLENGE

A well-known western U.S. utility (AWWUU) recently did an analysis of its backup systems in place at its substations and discovered that many of its products--particularly its networking switches did not have dual power inputs for redundancy in the event of a power failure.

For AWWUU, high availability is key, and significant downtime is not an option. Additionally, many of the networking switches are relatively early in their life cycle and the team at AWWUU has already invested time in learning the management software.

THE SOLUTION

AWWUU turned to Delta Surge for a solution. Delta Surge recently designed and built a unique product known as the DIMO (Dual Input / Multi-Output) Field Wiring Terminal. This field wiring terminal offers dual inputs to connect to two separate power sources at the substations and give the utility the redundancy needed via four power outputs to four separate devices for power pass through. The DIMO-HI model was selected as it is designed to accept the 125VDC power present in the utility. The DIMO units enabled the utility to preserve its investment in both networking hardware as well as its considerable investment in learning the network management software.

The field wiring terminal accessories which enabled the DIMO to be mounted in a variety of ways including via DIN-Rail , rack, panel or wall-mount, and tray-mount into a rack were also appealing to AWWUU--given the variety of their networking products that needed power redundancy. AWWUU chose to mount some field wiring terminals into racks via DIN-Rail

brackets on the backs of the vertically mounted units. Three units would fit across a piece of DIN-Rail on a 19-inch rack. The utility panel-mounted other units--some in small spaces--taking advantage of the DIMO's small footprint.

Among the networking products that AWWUU needed power redundancy for included a series of rackmount managed Ethernet switches, wireless access points, and terminal servers as well as smaller field switches. Some of these smaller switches connected to Power over Ethernet (PoE) cameras that were present around the substations for perimeter security. The DIMO field wiring terminals provide 100 watts for each of the four outputs to insure that the cameras will stay up and running. DIMO units also include built-in surge protection.

Another key consideration in choosing the DIMO Field Wiring Terminals was their ruggedness. All of the DIMO units have been purpose-built to operate in extreme conditions often found in power utility substations. Models have been designed to operate in temperatures ranging from -40°C to 85°C and include convection cooling to help insure longer life and to provide resistance against dirt, dust, and other contaminants.

MORE ABOUT DIMO FIELD WIRING TERMINALS

The DIMO Field Wiring Terminals support both high and low power ranges including 12, 24, 48, 60, 110, 125 or 250 VDC. All DIMO models have also been rigorously tested and feature a full range of compliance including safety, emissions, shock & vibration, and industry-specific testing including IEC61850-3, IEEE 1613, MIL-STD-810G, EN50155, DNV, CE and NEBS.

