



IntelliRupter® Fault Interrupter Ethernet Port Provides Communication Flexibility

S&C Featured Solution: IntelliRupter® fault interrupter External Ethernet Port

Location: Central United States

Customer Challenge

Non-utility companies, such as some oil and gas businesses, that own and operate power-distribution systems often lack their own line crews. So they typically depend on contractors to handle their installation and maintenance tasks. This not only can create obstacles for adding communication systems to distribution devices, but it also can generate cost and scheduling issues, such as when a bucket truck is required to change backup batteries in devices on distribution lines.

One oil and gas company located in the central United States recently found itself facing such challenges. The company, which owns 1,200 miles of distribution line in Oklahoma and Texas and five substations, utilizes a standard communication enclosure that includes an Ethernet switch, cellular modem, 900-MHz radio, and a battery backup for communication to distribution devices. Despite its setup, the company found communication to distribution equipment in rough-terrain oil-patch locations to be inconsistent and unreliable.

Subsequently, the oil and gas company found it increasingly necessary to have multiple communication devices that were easily accessible but that didn't require having to hire a contractor with a bucket truck.

S&C Solution

S&C Electric Company, which earlier provided IntelliRupter®PulseCloser®Fault Interrupters to the energy company, suggested an option available with the advanced fault interrupters that could address its communication issues.

As a result of that suggestion, the energy company chose to include the external Ethernet port option available with the IntelliRupter fault interrupters it was placing on its distribution line. This not only allowed easy access for installation and maintenance, but it also allowed for multiple communication devices to be co-located.



IntelliRupter fault interrupter with communication devices installed.

Ethernet port on the IntelliRupter fault interrupter communication module.



S&C IntelliRupter fault interrupter Ethernet option saves customer dollars, enhances communication reliability.



The optional feature comes with a weatherproof RJ45 Ethernet port in the faceplate of the communication module prewired internally in the IntelliRupter fault interrupter. This type of connection costs less than a fiber-optic connector and transceiver. The oil and gas company also ordered an external power supply to provide the power required to operate everything.

Results

The optional external Ethernet port available with S&C's IntelliRupter fault interrupters provided the flexibility the energy company needed for easy access to multiple communication devices and their batteries for routine maintenance, thereby lowering its overall costs by not having to send out a bucket truck to visit each communication device. The external Ethernet port has worked so well that the oil and gas company has given S&C an order to retrofit this option on previously ordered IntelliRupter fault interrupter units.



Typical IntelliRupter fault interrupter installed in a substation location.



IntelliRupter fault interrupters with communication devices installed down the pole for easy access, connected via Ethernet connections.