



Service Bulletin

Bulletin No: SB-0026-19-345-FS Effective Date: 12-11-2019 Type: Information

Subject: Using flexSCADA to monitor sites with questionable AC power grids.

Scope

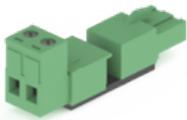
This service bulletin describes the benefits of using flexSCADA to monitor sites with fluctuating or unreliable AC power.

Background

The benefits of using flexSCADA to monitor crucial site functions in remote, off-grid locations are well documented, however flexSCADA can also provide invaluable monitoring capabilities for AC grid powered sites.

Using the Q5 line to monitor AC voltage

AC grid powered sites utilize an AC charging source for the DC emergency systems designed to keep their systems up and running. While the flexSCADA is designed to operate in a DC voltage environment, the use of a small adapter known as the high voltage reducer (HVIN) allows clients to monitor the AC voltage of a location utilizing the Q5. This is incredibly useful in areas where the AC power grid is unreliable or “shaky”.



HVIN adaptor

The HVIN adaptor replaces one analog input channel on the Q5 device. Removing the terminal block from the selected channel and replacing it with the HVIN allows the device to monitor incoming AC voltages. After placing the HVIN into the selected channel, two-legs of the AC lines are required for the input.

Once the lines are secured to the HVIN terminal block, the Q5 can then be used to show AC on the selected channel. Configuration is completed the same as any other analog input. The only difference is that while configuring the HVIN, users will have to select AC voltage rules, rather than DC voltage rules (note that the Q5 must be powered by a DC source, never AC).

Once configured and operational, the HVIN provides a wide variety of useful monitoring and control options for sites that have unreliable AC power.

As the Q5 is DC powered, a loss of AC power does not shut the device off, allowing it to register a loss of AC event independent of available AC power. Once a loss of AC power is detected, the Q5 could be pre-configured to trigger a notification alert to the client, as well as start a countdown timer displaying how long the DC power source will last without being recharged. The Q5 could also be configured to send a text or email notification to the client when AC power has been restored or when DC power source voltage reaches a critical, pre-determined level.

For more information please contact Mission Critical Energy at (716) 276-8465 or visit us at www.missioncriticalenergy.com.