Troubleshooting Intermittent Communications Errors with 890 and 850 Series Test Systems Revised March 22, 2016
Scribner Associates, Inc.

- 1. Ensure that the host computer is running Windows 7, 8, 8.1, or 10 with latest updates and service packs installed (updates should be set up to install when acknowledged by the user, not automatically). Check Control Panel Power settings and ensure that all power management modes (sleep, suspend, hibernate, etc.) are disabled when operating on AC power.
- 2. Disconnect any other instruments from the GPIB bus and make sure the connectors are securely attached.
- 3. Try a different PC, GPIB card or adaptor, and GPIB cable. Computer hardware problems or other installed software can cause communications problems. The host computer should not be used for purposes other than running FuelCell.
- 4. Ensure that the PC and 850 or 890 are plugged into the same wall outlet (same phase, same circuit breaker).
- 5. Plug the 850 or 890 and PC into a UPS with input filtering. Ensure that the UPS is working by periodically unplugging AC power while the system is running and ensuring that there are no malfunctions. Power quality issues can cause intermittent communications problems.
- 6. Ensure that the latest version of FuelCell is used (available from the Downloads section of www.scribner.com).
- 7. Ensure that the latest version of NI488.2 software, suitable for the host computer operating system and GPIB adaptor, is used (available from www.ni.com).
- 8. Only the GPIB-USB-B, GPIB-USB-HS, and PCI-GPIB adaptors from National Instruments are known to be compatible with SAI products. Other brands or models may not work properly and should be replaced with one of the above models if problems are suspected.