Safe Monitoring of Inactive Loops
APPLICATION C221

The customer requires a digital pressure transmitter to monitor process pressure at a location that is several hundred feet from the controller. The most cost effective solution is a 2-wire, loop-powered digital pressure gauge because it uses the same two wires for power and to retransmit the pressure reading via the 4-20mADC loop.

The Engineering Issue
- If the loop supply is turned off for maintenance, the technician cannot perform any work at the remote location without verifying the pressure is at zero.

The customer installed a **Cecomp SuperCap Loop-Powered Digital Pressure Transmitter**. This transmitter includes a Super Capacitor that allows the technician to display pressure readings when the loop power to the gauge is turned off. By pressing a button, the engineer can configure the transmitter to turn on for 15 second intervals or to be on continuously, up to 40 minutes. The SuperCap automatically recharges when the loop-power is turned back on and a fully discharged SuperCap will recharge in two hours. Also, the SuperCap will hold its charge for up to a year if it is not used and the power remains off. And, the SuperCap requires NO maintenance.

Problem. Solved.