

Monitoring aircraft tire pressure

APPLICATION C123

Type of Company: [Airline](#)

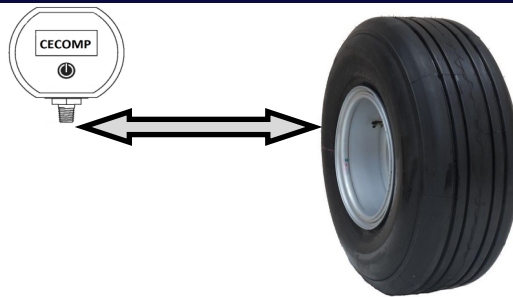
Location: [Minnesota](#)

The FAA requires that a “cold” tire pressure check be made and logged on all aircraft landing gear tires every day using a “calibrated” pressure gauge as an aircraft tire can lose 1 or 2 percent pressure a day. The aircraft manufacturer has also notified the airlines that electronic devices that are used in aircraft hangers must meet the National Electrical Code.



The Engineering Issue

- The engineer has three requirements:
 1. Increase the accuracy of the monitoring gauge so that the inflation pressure would be better maintained on the tires for longer wear and increased tire integrity
 2. A digital gauge that is rugged, FM approved Intrinsically Safe (IS), easy to read and cost effective for a visual indication of the tire pressure.
 3. Gauge must maintain calibration and withstand the use and abuse on the tarmac.



The engineer used a custom Cecom DPG2000BBL with an extended temperature range LCD and tarmac ruggedness built in. After using the gauge, the engineer stated:

- The gauge was “very tough, durable, and almost bulletproof”
- Due to the gauge maintaining accuracy and calibration they increased the number of takeoffs and landings per tire

Problem. Solved.

