

TOTALFLOW

Technical Bulletin 151

Potential noisy readings when checking or calibrating 6600 (generation #1) Flow Computers with PCCU32 versions of laptop software

Totalflow Technical Bulletin Version 1.0, Revision AA (13 July 2007)

ABB Inc. TOTALFLOW Products 7051 Industrial Blvd. Bartlesville, OK 74006 (918) 338-4888 phone (918) 338-4699 fax (800) 442-3097 www.abb.com/totalflow



1. Purpose

To describe an issue that can occur when checking or calibrating Totalflow's original generation #1 6600 Flow Computer Units. This issue is related to Totalflow's Windows® version of Portable Calibration and Collection Unit (PCCU 32) software.

2. Description

PCCU 32 software interacts over the RS-232 serial port faster than our DOS versions of the same software. This increased data speed can introduce noise onto the 6600 (generation #1) flow computer address and data lines causing noisy analog readings (differential and static pressure as well as temperature). The noisy readings can cause erroneous calibration check entries and invalid calibrations. This issue only occurs with the 6600 generation #1 flow computers and **does not occur** on 6400/6700 (2nd generation) and microFLO and XSeries (3rd generation) flow computer products.

The following note was added to the PCCU help files to indicate the user should uncheck the "continuous" box prior to checking or calibrating an older 6600 Flow Computer. This specific help file is available when connecting to an older 6600 Flow Computer and will not be seen when connecting to 2nd and 3rd generation motherboards. We have since added another feature where the box can be unchecked and the readings updated every 1,5 or 10 seconds by right clicking within the gray area and selecting "update interval". This feature will keep the user from having to remember to press the update button but will slow the communications and reduce the noise level of the analog readings.



- Step 9 Click on the Low Cal Point button. Verify the Current Reading has stabilized by using the Continuous update. An entry value will already be displayed based on the target value. Accept this value by clicking the OK button or enter a different value and press the Enter key. The flow computer's value will be recorded in the Reading column and be based on the previous calibration range. The entered value will be displayed in the Entry column.
 - **NOTE:** If the device is a 6600 series flow computer, the Current Reading may jump around excessively due to the continuous reads. To remedy, un-check the Continuous box and do a few updates using the Now button to verify the reading has stabilized. Do this for each calibration point.



3. Conclusion

This is only a potential issue when combining our 1st generation 6600 Flow Computer with our Windows® versions of PCCU32 software. The 6600 Flow Computer was manufactured from 1985 through 1994. If you have technical questions concerning this bulletin contact our service organization at (800) 442-3097 option #2.