



TOTALFLOW

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Analog to Digital Conversion Error using Multiple Communication Ports

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1. Purpose

This paper describes an analog to digital conversion error that can occur in a small number of Flow Computer communication applications.

2. Description

A problem was discovered on a very small percentage of 6400 and 6700 installations. The problem occurs when two remote communication ports are active and running packet protocol (new database collections) on communications port #1. The second remote communications port can be running Modbus or Totalflow protocol.

This problem can also occur on sites where an AIU (analyzer interface unit) is communicating to one or more flow computers where the flow computer has a second port transmitting Modbus or Totalflow protocol to another device.

In both cases described above, one symptom will be that the flow computer logs A/D alarms into the event file for no apparent reason. The easiest way to determine if this alarm is occurring is to review the events file. Two events will be logged, -99 (AMU communications error) and -100 (re-established AMU communications).

The flow computer can also register the -99 and -100 events if there is a communication link failure between the AMU and Flow Computer. An EPROM upgrade will NOT eliminate the -99 and -100 site code events if the FCU is having intermittent communications failures with the AMU.

3. Conclusion

If you have an application where more than one remote communications port is in operation and are experiencing this problem, please call our customer service department at (800) 442-3097 option 2. We will provide free upgrades, where required. In applications where one or no remote communication port is being used, a replacement EPROM is not necessary. The following EPROMs have been fixed:

6400 (2015333 electronics board) standard EPROM 2015494-012 or later

6700 (2015382 electronics board) EPROM 2015489-014 or later

6700 w/Plug-in RTU support (2015382 electronics board) EPROM 2015490-015 or later