

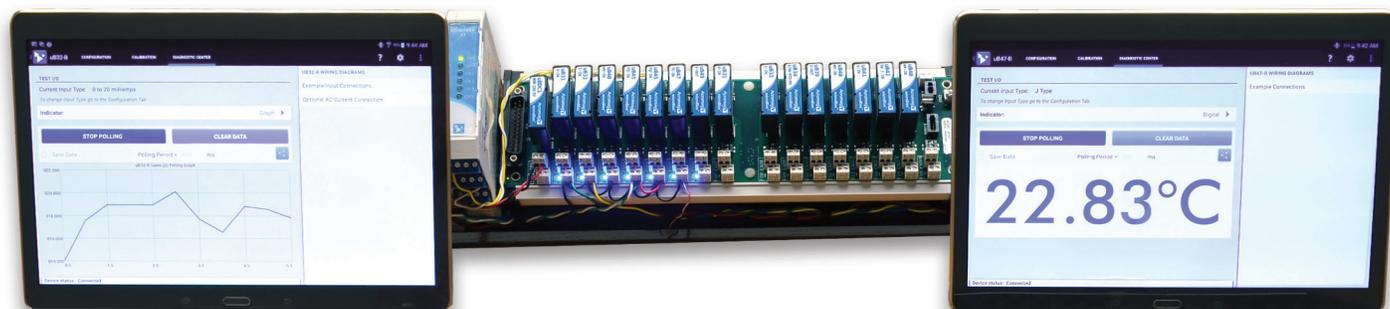
# Application Note: Signal Conditioners with Built-in Data Logging

## Defining the Problem:

A manufacturer of sensors and electrical controls does burn-in testing for troubleshooting purposes. A test system that can operate with either an Android® or iOS® mobile device is preferred.

## System Requirements:

The application requires a product that can monitor a variety of signals, provide analog or limit alarm outputs and have data logging capability. The test duration could be several minutes to a day and the results need to be saved in an Excel format.



## Implementing the Solution:

1. Download the Acromag Agility™ mobile app from the [Google Play™ store](#) or [Apple® App Store®](#).
2. Open the Agility mobile app and go to the configuration screen. Enable the alarm output and enter the set point and deadband. When the set point is reached, this output will be 5V or 0V, normal or reverse acting. It can drive an external relay or feed a TTL input.
3. Navigate to the diagnostic screen where the trending feature is accessed. There are two types of indicators available, a digital display or graphical representation.
4. Enter a polling period from 0.5 sec to 60 sec. With a capacity of 5000 samples, the duration of saved data can be up to 83 hours. This is a moving average where sample # 5001 is added to the total and # 1 is dropped off.
5. Tap save data, then tap start polling. The Agility app automatically creates an Acromag folder in the mobile device and saves the input values to a spreadsheet in that folder. The data then can be emailed by tapping the share button.

## Featured Products:

[microBlox™ Signal Conditioners](#)  
Voltage, current, RTD, thermocouple,  
frequency and high speed models.

[Acromag Agility™ App for Android](#)  
Free from the Google Play™ store.

[Acromag Agility™ App for iOS](#)  
Free from Apple® iTunes®.

## Notes:

Would you like to have app notes like this delivered straight to your inbox? [Click here](#) to receive Acromag's monthly eNewsletter.

## Why Acromag:

The microBlox™ signal conditioners provide an innovative, accurate and easy solution that combines signal conditioning functions, transmitter or alarm, and data logging all in one design. Choose from fixed range models or *Bluetooth*® wireless technology with user-configurable I/O. The miniature hot swappable modules offer the ability to set custom I/O ranges and alarm functions from a smartphone or tablet.