



TSI® FMS 5 SOFTWARE HOW TO CONFIGURE AEROTRAK®+ REMOTE PARTICLE COUNTER INSTANT ALARM

TECHNICAL BULLETIN-TCC-174 (US)
(9/6/2019) Rev A

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Description

This procedure explains how to configure an Instant Alarm using the AeroTrak®+ Remote Particle Counters [both with pump (6000 Series) and without pump (7000 Series)] in FMS 5.

This procedure introduces a new type of alarm so to differentiate it we will refer to the current sample period related alarm as “normal” and the new alarm as Instant Alarm. Even though it is a new alarm type it is still bounded by the same alarm threshold as the “normal” alarm.

The instructions and examples explained herein are using the FMS pharmaceutical screen layout.



Prerequisites

- This procedure is only valid for FMS 5.5.1 or above with use of all AeroTrak+ Remote Particle Counters.
- Prior to configuring an Instant Alarm Sample Point for an AeroTrak+ Remote Particle Counter, instruments must be configured according to technical bulletin TCC-165—How to Configure AeroTrak+ Remote Particle Counters.
- Windows® Firewall Inbound Rule is set to allow TCP on port 3603.

Assumptions

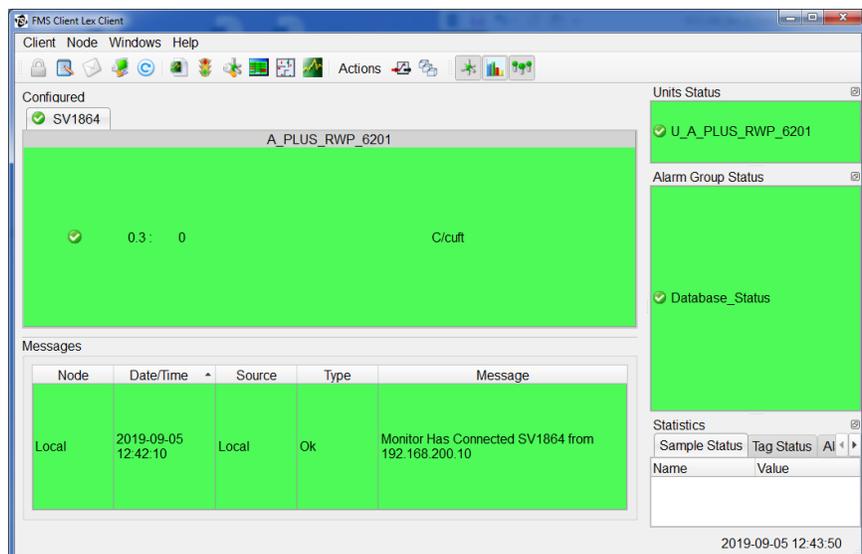
- The reader has configured an AeroTrak+ Remote instrument on their FMS system using technical bulletin TCC-165—How to Configure AeroTrak+ Remote Particle Counters in FMS and it is running successfully. The counts per ft³ sample point created there will be used in the following instructions.
- FMS Sample Points Description:

Unit Name:	U_A_PLUS_RWP_6301
Sample point Name (ft³):	A_PLUS_RWP_6301
Sample point Name (Instant Alarm):	A_PLUS_RWP_6301_IA
Sample Interval:	60
Upper Level Alarm Value (ft³):	10
Instant Alarm Buffer Size:	60

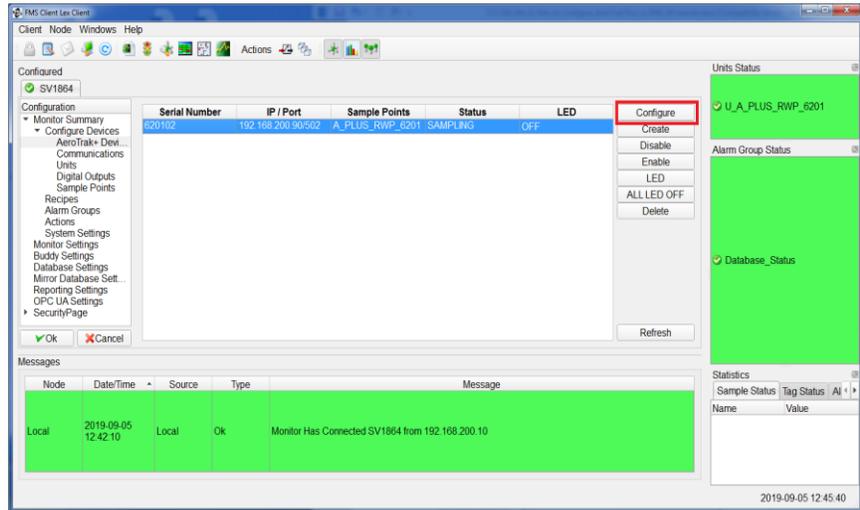
Configuration of an Instant Alarm Sample Point

Modifying an Existing AeroTrak+ Configuration in FMS

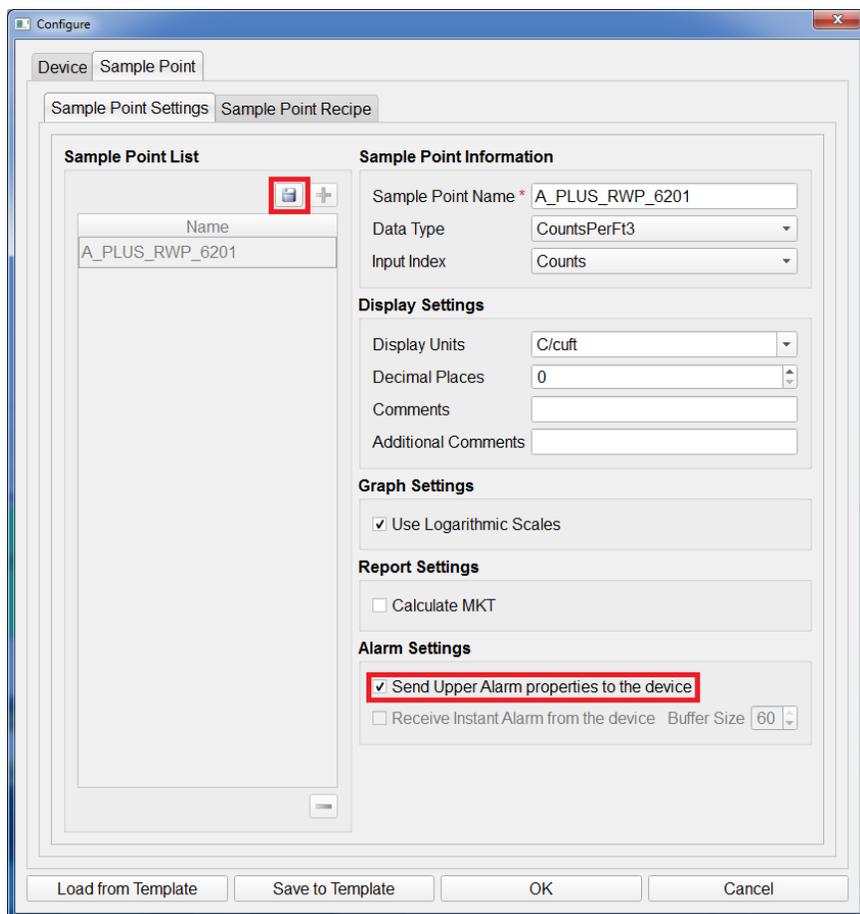
1. From the FMS Client.



2. Go to **Configure Node**.
3. Expand **Monitor Summary**.
4. Expand **Configure Devices**.
5. Click **AeroTrak+ Devices**.
6. Select one of the devices listed and then select **Configure**.



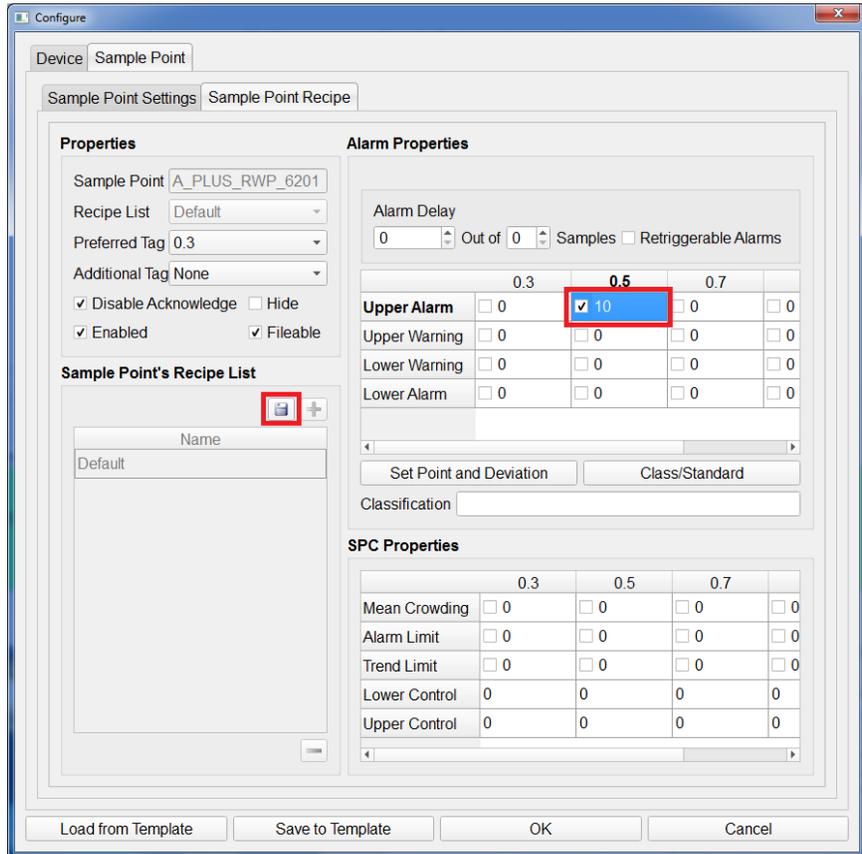
7. From the **Sample Point Settings** tab.
8. Select the **Send Upper Alarm properties to the device** option.
9. Click the **Save** button.



10. From the **Sample Point Recipe** tab of the ft³ sample point.

11. Set an **Upper Alarm** limit of 10.

12. Click the **Save** button.



13. From the **Sample Point Settings** tab.

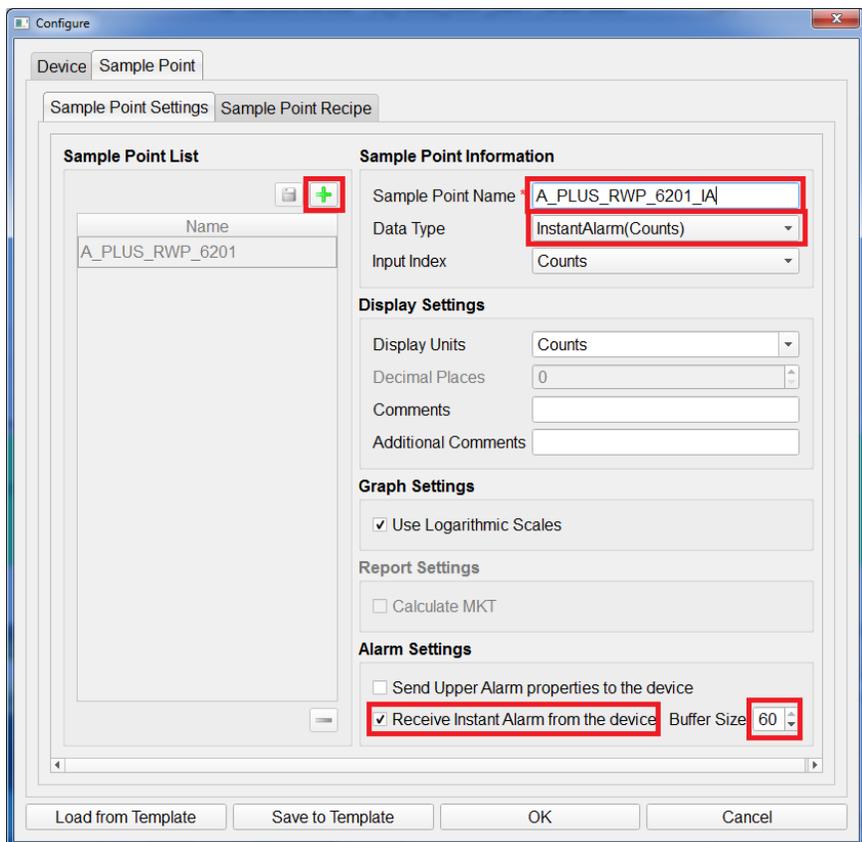
14. Change the **Sample Point Name**.

15. Change the Data type to **InstantAlarm(Counts)**.

16. The **Receive Instant Alarm from the device** option should be selected by default.

17. The **Buffer Size** default is 60.

18. Click the **green plus sign** to add the new sample point.



NEW ALARM SETTINGS

Receive Instant Alarm from the device	When used in conjunction with Upper Alarm settings on the Sample Point Recipe tab, you can setup the instrument to generate Instant Alarm data and send it to FMS.
Buffer Size	This is the size of the Rolling Buffer used by the instrument to generate an Instant Alarm. See the Instrument manual (P/N 6012577) for a description.

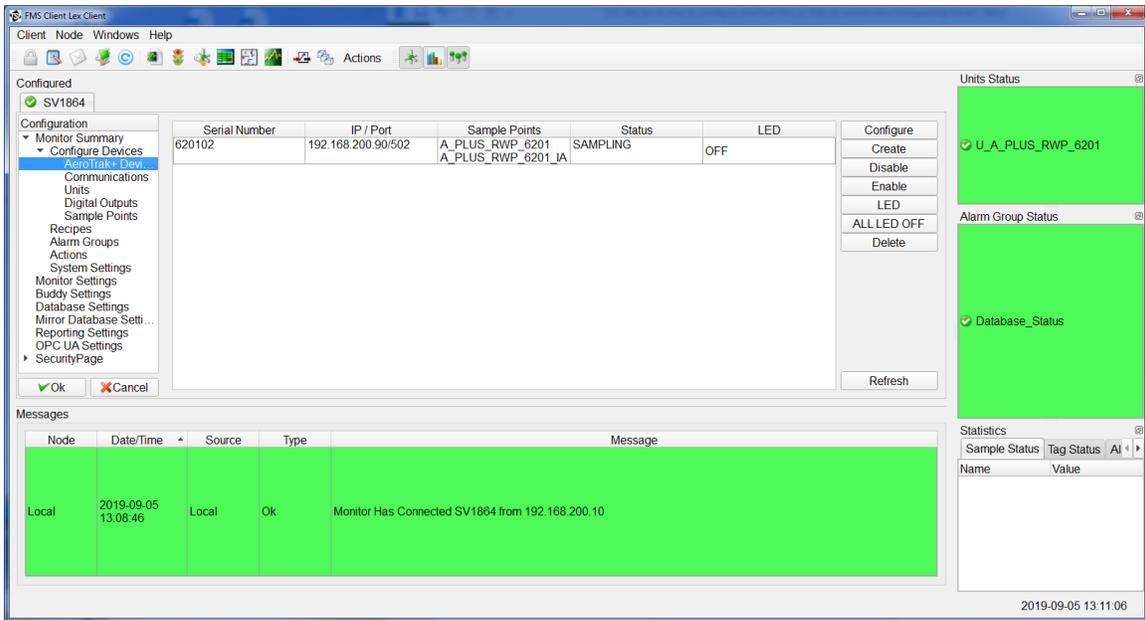
- From the **Sample Point Recipe** tab of the new Instant Alarm sample point. Ensure that the Sample Point name is the name used for the Instant Alarm sample point.
- Observe the **Upper Alarm** limit is set and is un-editable. In this case, it was converted from ft³ to counts on a 0.1 CFM instrument and 60-second sample period.

The screenshot shows the 'Configure' dialog box for a 'Sample Point Recipe'. The 'Sample Point' field is highlighted with a red box and contains the text 'A_PLUS_RWP_6201_IA'. Below this, the 'Alarm Properties' section contains a table with columns for 0.3, 0.5, and 0.7. The 'Upper Alarm' row has a checked checkbox under the 0.5 column, which is also highlighted with a red box. The 'SPC Properties' section has a similar table with values of 0 for all cells.

IMPORTANT NOTE

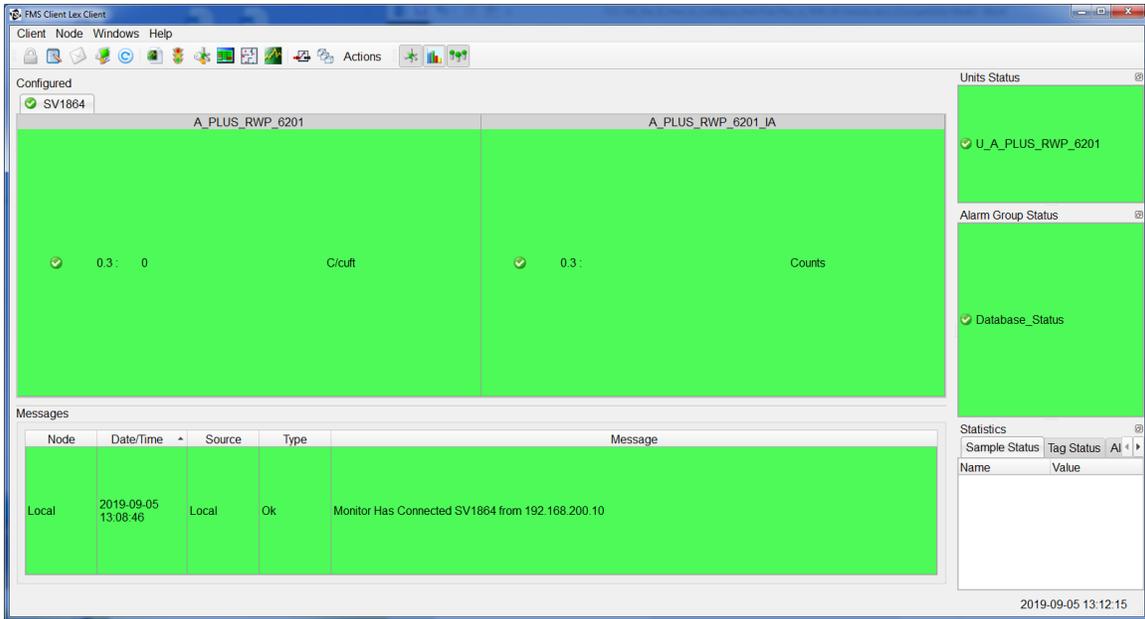
It is possible to select the **Send Upper Alarm properties to the device** option on the Instant Alarm sample point instead of the ft³ sample point. In fact, you do not have to have the ft³ sample point at all. In this case, the Upper Alarm threshold would be editable for the Instant Alarm Sample Point.

21. Select **OK**, the Configure screen will close. You will see your new sample point listed.



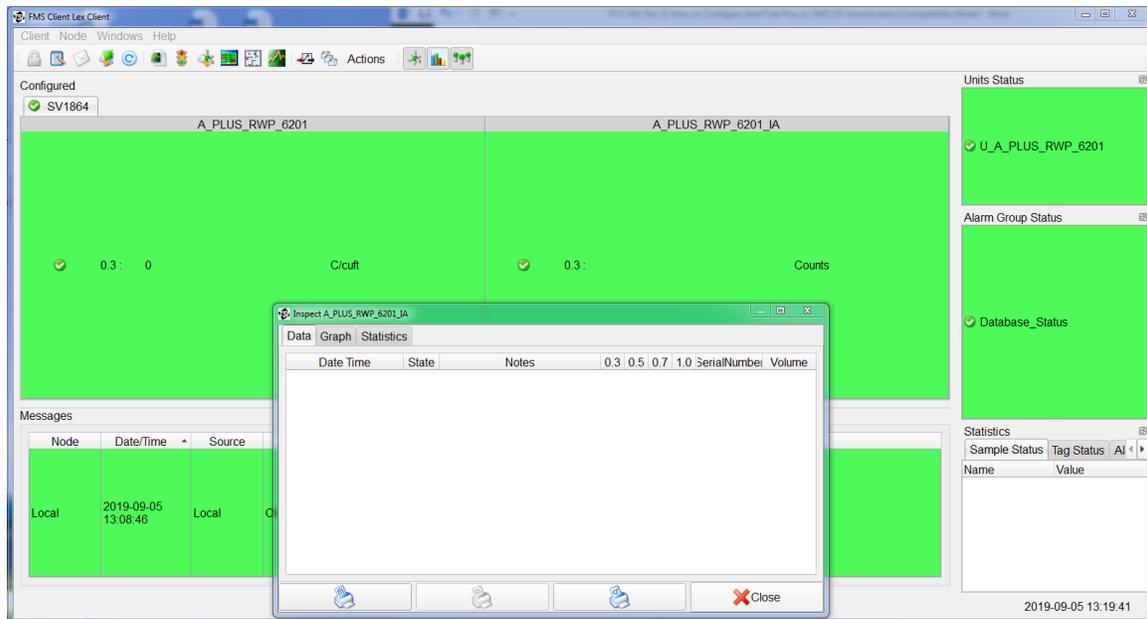
22. From the AeroTrak+ Devices screen, select **OK** then **Save** and finally **Yes** to reboot.

23. After monitoring node is restarted, the sample point displays on the screen and the instrument will start sampling.

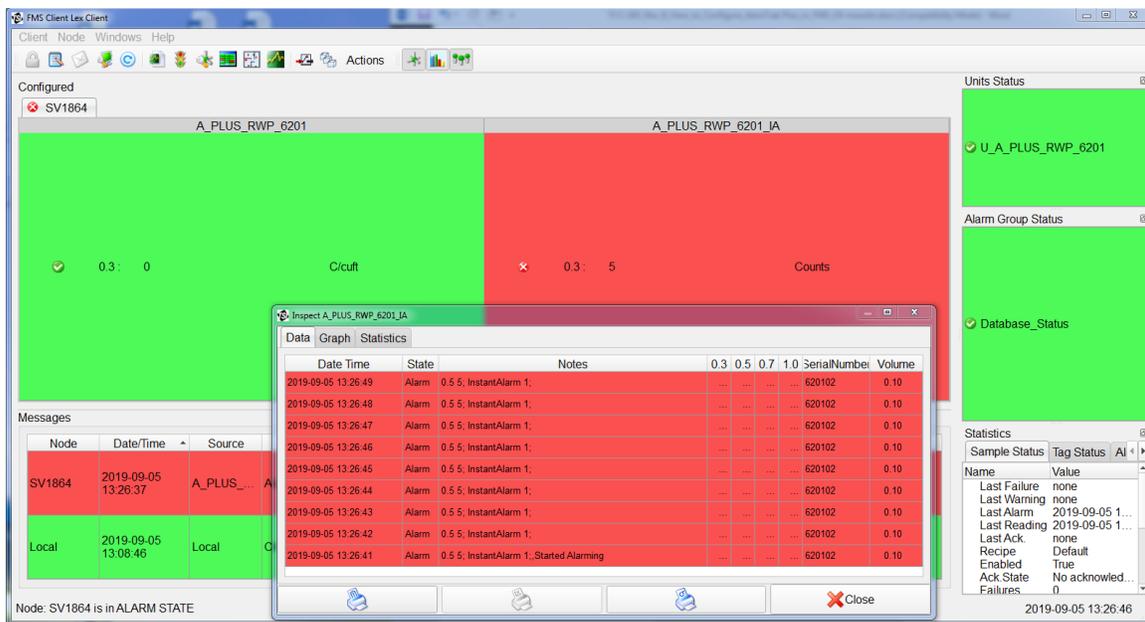


Receiving an Instant Alarm

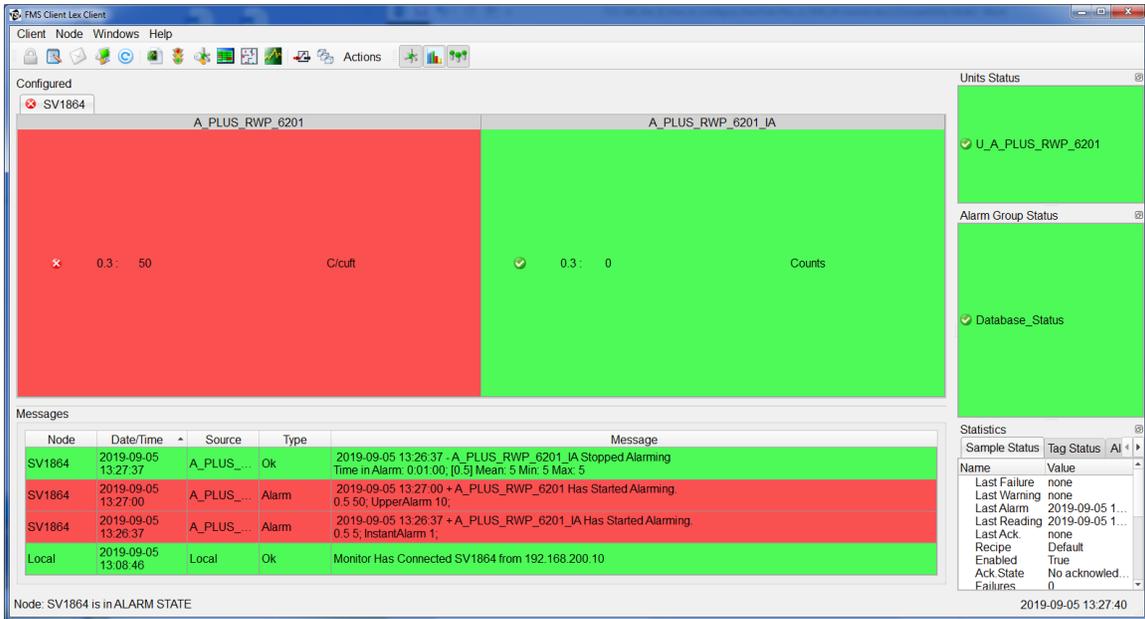
After new data is received from the Unit, the Instant Alarm sample point will change to an Ok state (green). This new data need not be Instant Alarm data but the Instant Alarm sample point will still reflect the state of the Unit at this time. The Instant Alarm sample point will only receive Instant Alarm data.



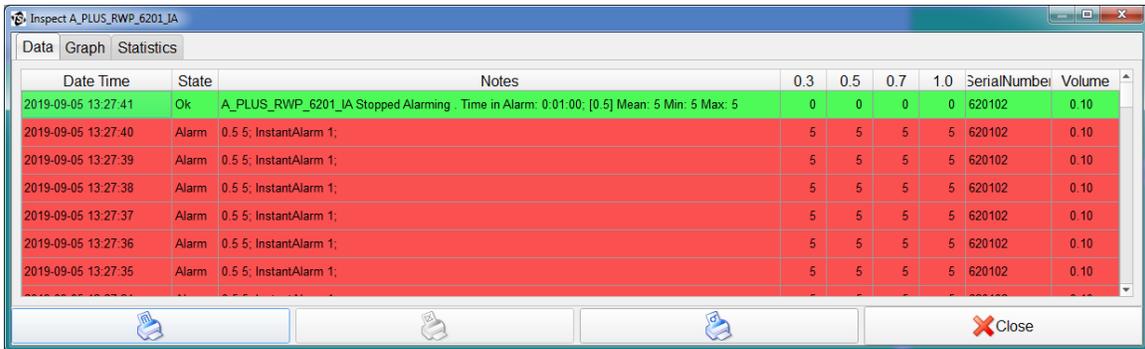
Once an alarm level event occurs on the instrument, FMS will receive Instant Alarm messages. These will likely occur in advance of the “normal” alarm.



The Instant Alarm may also end earlier than the “normal” alarm.



The Instant Alarm data is generated every second that the Instant Alarm is active. FMS will show the first Instant Alarm data as **Started Alarming** and the last as **Stopped Alarming** just like the “normal” alarm data.



IMPORTANT NOTE

Because the Instant Alarm data is not continuous a graph of the Instant Alarm data may not look good.

Troubleshooting

1. If no Instant Alarm messages are being received, please check your firewall settings to be sure that TCP port 3603 can be used.

References—Technical Bulletins

- TCC-165—How to Configure AeroTrak+ Remote Particle Counter in FMS5
- TCC-166—How to Setup AeroTrak+ Remote Particle Counter with Pump (6000 Series)
- TCC-167—How to Setup AeroTrak+ Remote Particle Counter (7000 Series)
- AeroTrak+ Remote Particle Counter Operation Manual (P/N 6012577)

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