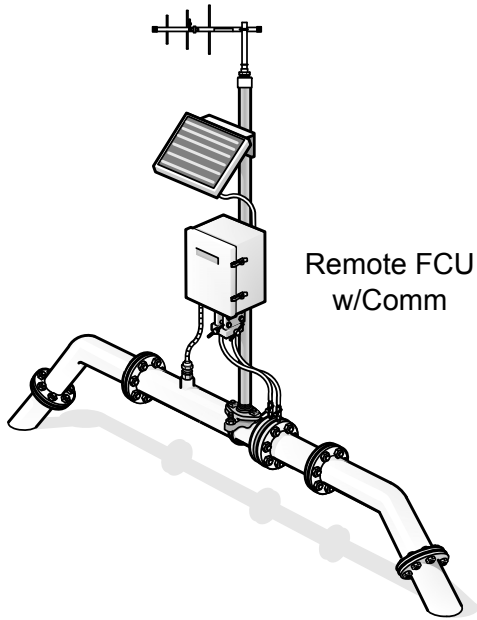
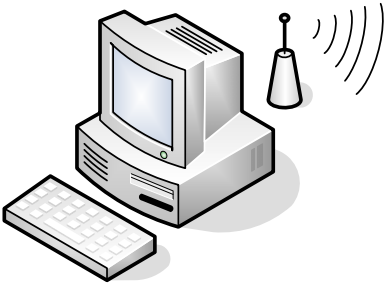




WinCCU Start-Up Guide

Desktop Computer  
w/WinCCU & Comm



Remote FCU  
w/Comm

**TOTALFLOW**

MEASUREMENT & CONTROL SYSTEMS

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## Introduction

The Totalflow Windows Central Collection Unit (WinCCU®) is a set of functions integrated into a single Windows® program that is used to collect, edit, process and report on data generated from Totalflow flow computer units (FCU), remote terminal units (RTU) or NGC analyzers.

The following information contained within this start-up guide will walk the user through the basic installation and setup of WinCCU. For more detailed information, refer to the help files provided with the software.

# Software Installation

## System Requirements

Before beginning the installation of WinCCU, please ensure that the following system requirements are met:

<b>Operating System</b>	Windows 2000 or later Microsoft Internet Explorer v. 5.0 or later
<b>Microprocessor</b>	Pentium
<b>Memory</b>	512 MB
<b>Hard Disk Space</b>	50 MB
<b>Disk Drive</b>	CD Rom Drive
<b>Video Adapter</b>	SVGA or higher resolution
<b>Peripheral</b>	Mouse

**FYI**



When the user receives the application disk from ABB Totalflow, they will notice that several applications are stored on the disk. It should be noted that the user will only be able to load the application that they have purchased. The remaining applications will not load.

## WinCCU Setup and Installation

### **Step 1** Load Application

**1A** Load the Totalflow application disk in the PC CD/DVD drive. The disk will initialize. Once completed, the Totalflow Host Software Product screen displays. Click the Install Products button.

**1B** The Application window displays. From the list of applications, select the WinCCU – Version X.XX button.

**FYI**



The version of WinCCU that the user is running will vary depending on the company's specific needs.

**1C** When the application is loaded, a Welcome screen displays. Click Next.

**1D** When the User Information dialog box displays, enter the user's name and company name. In the Serial Number field,

type in the serial number associated with the user's version of WinCCU. The serial number is printed on an insert inside the sealed envelope that contains the software disk. Click Next.

**FYI**



When typing in the serial number, the user needs to ensure that the number is typed exactly as it appears on the printed sheet, to include dashes (-).

## **Step 2**      **Application Set Up**

- 2A** The WinCCU window displays. The user may determine the type of installation they wish to complete. Options are:
- Complete – All WinCCU modules.
  - Custom – Allows the user to select which modules appear in the installation.
  - Full – All WinCCU modules.
  - Minimum 1 – Installation that only includes the Remote Communications and Archive support modules.
  - Minimum 2 – Installation that only includes the Remote, Archive and Long Term database support modules.

Select the installation type, and click the Next button.

- 2B** In the new Setup Type dialog box, make the appropriate selection. If multiple users and/or computers need to have WinCCU loaded onto them, place a check in the Install for All Users checkbox. Additionally, if this is an update to a pre-existing WinCCU application, place a check in the Override Existing Registry checkbox. Click the Next button.

- 2C** The Select Program Folder dialog box displays. The user can then set a program icon in the Program folder. The default is set to Totalflow WinCCU. If this default is acceptable, click the Next button; otherwise, rename the folder, and click the Next button.

A series of install wizards initialize. The user needs to install all of them to complete the overall WinCCU installation. Follow the on-screen instructions to load.

- 2D** Once loaded, the Totalflow WinCCU window displays with all of the relevant icons. The user can drag these icons to their desktop, for ease of use. A Setup Complete dialog box displays. The user can then launch WinCCU or choose to view

the Readme file. Regardless, click the Finish button to complete the installation.

## Remote Communication Setup

The following setup takes place at the remote flow computer site.

The following assumptions have been made:

- Radio connected to COM 1
- 9600 baud, 8 data bits, no parity, 1 stop bit, listen cycle of 4 and default values. These same values MUST be used at the WinCCU (Host) end.

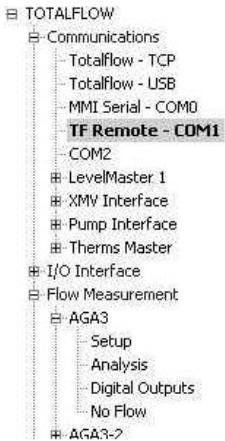
### Step 3 PCCU Set Up

- 3A** Open PCCU32, and connect locally to the flow computer. From the Entry mode screen, select the main device at the top of the tree-view located on the left side. Under the Station Setup tab, type in the Station Name in the space to the right of the Station ID.

The screenshot displays the PCCU32 software interface. On the left is a tree view under the 'Entry' mode, with 'TOTALFLOW' selected. The right pane shows the 'Station Setup' tab with a table of parameters. The 'Station ID' field is circled and contains the value 'TOTALFLOW'.

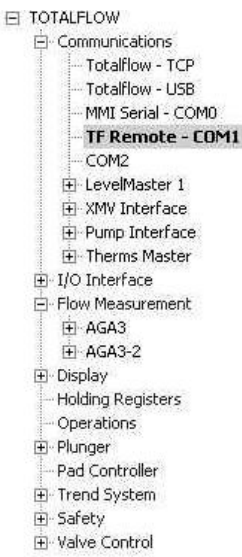
	Description	
0.0.4	Station ID	TOTALFLOW
0.0.5	Location	Z103393-001
0.9.0	Date/Time	02:05:09 16:12:35
0.9.0	Set Device with PCCU Date/Time	Ho
	--- Security ---	
0.0.6	Security Code Level 1	
0.0.7	Security Code Level 2	
0.7.3	Security Switch Status	Off
	--- Sleep Mode ---	
0.10.2	Remote Comm Cutoff Voltage	11.90
0.10.3	Sleep Mode Entry Voltage	10.90
0.8.8	Sleep Mode Hold-off Time (sec)	120
0.9.11	Wake Up Time	03:00:00
0.7.14	Wake Up Time Mode	Time from Start of Sleep

- 3B** In the tree-view, expand Communications, and select TF-Remote – Com 1. Click the Setup tab. Establish the port name, set the protocol of Totalflow Remote, set the port to COM1, set the baud rate to 9600 and set the listen cycle to 4. Once these are set, click the Send button.



Setup   <b>Advanced</b>   Schedule   Modem		
Description		
0.4.5	Port Name	TF Remote - COM1
4.3.3	Port	COM1:
4.0.6	Protocol	Totalflow Remote
4.0.2	Baud Rate	9600
4.0.7	Listen Cycle	4

**3C** Click the Advanced tab. Establish the interface as RS-232, the data bits to 8 and the parity to None. Upon completion, click the Send button.



Setup   <b>Advanced</b>   Schedule   Modem		
Description		
4.0.1	Interface	Rs232
4.0.3	Data Bits	8
4.0.4	Parity	None
4.0.5	Stop Bits	1
4.1.10	Response Delay (milliseconds)	40
4.1.0	Power Up Delay (milliseconds)	60
4.1.1	Xmit Key Delay (milliseconds)	420
4.1.2	Unkey Delay (milliseconds)	40
4.0.8	Wait for Host Timeout (seconds)	7
4.0.15	Switched V-Batt/Operate/Comsw	Enable

**Step 4 WinCPC Set Up (For this step, the user has returned to the office, or Host end)**

During the initial installation of WinCCU, WinCPC was also loaded as a stand-alone application.

**4A** Open WinCPC from the Start > Program > Totalflow WinCCU menu. When the dialog box displays, select Setup from the window's menu bar and then Setup from the drop-down menu.

**4B** In the CPC Setup dialog box, click the browse button next to the Comm Server path, and locate the correct address. Set the left-most port name to COM1, Enable to Yes, Comm Type to RS232 and Char. Timeout to 3. Click the OK button and then the Start button.

The screenshot shows the 'CPC Setup' dialog box. It has a title bar with 'CPC Setup' and a close button. The main area contains several fields and buttons. At the top, there are two text boxes for 'Comm Server Path' and 'Activity Log Path', both containing 'C:\WinCCU32'. Below these is a 'Server Delay (1/10 sec)' field with the value '1'. To the right of these fields are buttons for 'OK', 'Cancel', 'Help', and 'Advance...'. Below the delay field is a grid of five columns for port configuration. Each column has a 'Port Name' dropdown (COM1, COM2, COM3, COM4, COM5), an 'Enable' dropdown (YES, NO, NO, NO, NO), a 'Comm Type' dropdown (RS232, RS232, RADIO, RADIO, RADIO), a 'Char. Timeout' text box (3, 3, 3, 3, 3), and a 'Modem' button.

**FYI**



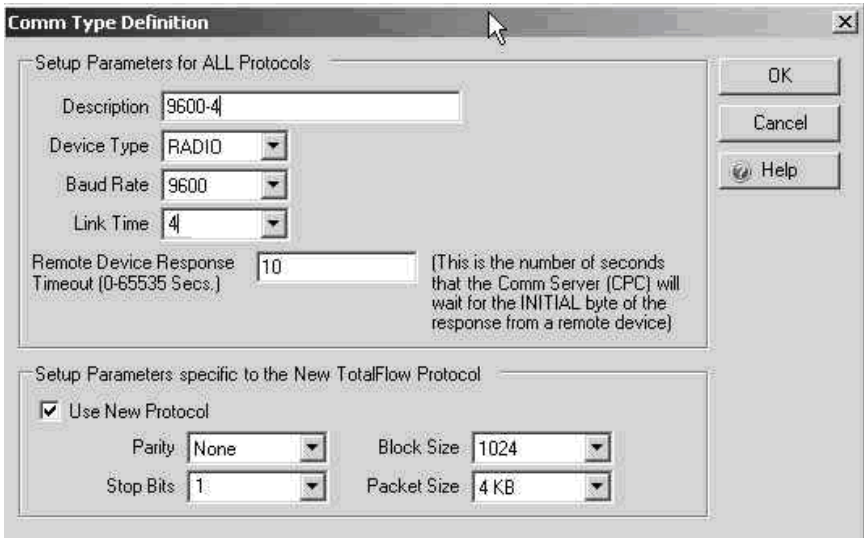
WinCPC must be running for remote communication to work. Minimize the window.

## **Step 5** WinCCU Set Up

**5A** Start WinCCU. Click the ID Manager icon, and select Comm Types from the drop-down menu.

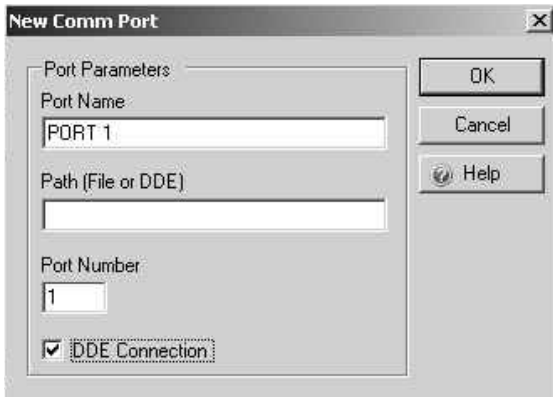
**5B** In the Comm Types dialog box, click the Add button. This will open the Comm Type Definition dialog box.

**5C** Enter a description name, set the device type to Radio, baud rate to 9600, link time to 4 and stop bits to 1. These parameters must match the remote end. Click the OK button to save, followed by the OK button to exit.



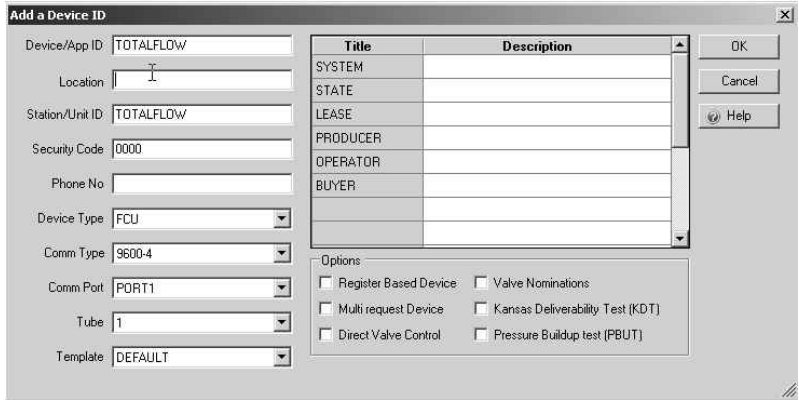
**5D** Click the ID Manager icon, and select Comm Ports from the drop-down menu.

**5E** In the Comm Ports dialog box, click the Add button. Enter a port name, set the Port Number to 1 and place a check in the DDE Connection checkbox. Click the OK button to save, followed by the OK button to exit.

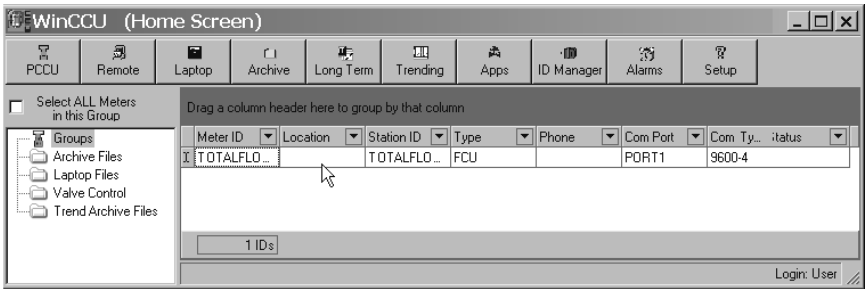


**5F** Click the ID Manager icon, and select Add ID from the drop-down menu. In the Add a Device ID dialog box, enter in the device/app ID, the station/unit ID, set the Device Type to FCU, select the Comm Type and Comm Port and set the Tube to 1. Additionally, if a security code exists for the FCU, add the existing security code. When finished, click the OK button.

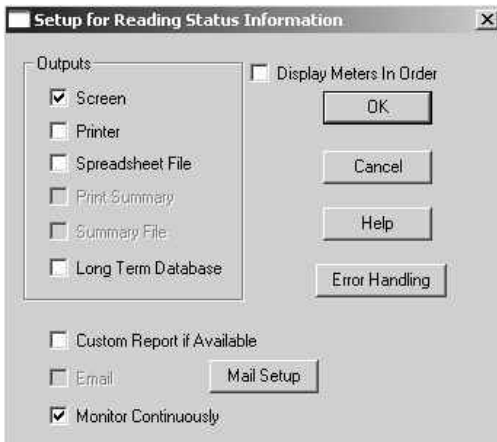




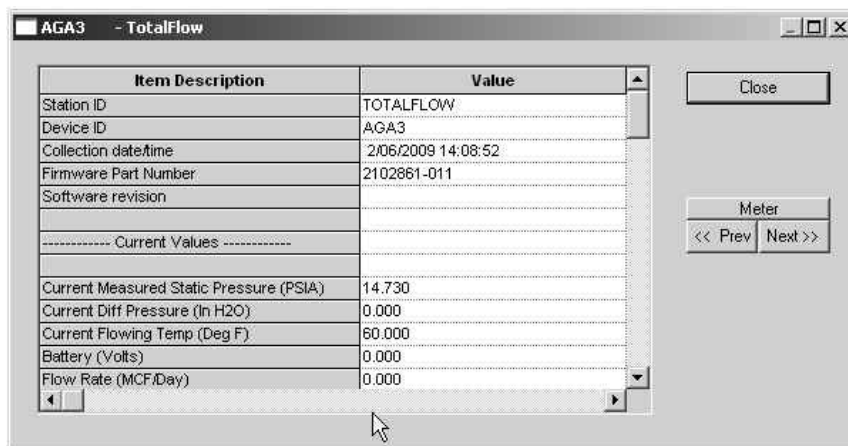
**5G** From the main WinCCU window, highlight the newly created meter ID.



**5H** Click the Remote icon, and select Status from the drop-down menu. In the Setup for Reading Status Information dialog box, place a check in the Screen checkbox and a check in the Monitor Continuously checkbox. Click the OK button.



If everything is set up correctly, the default template displays the meter's current values.



The screenshot shows a software window titled "AGA3 - TotalFlow". It contains a table with two columns: "Item Description" and "Value". The table lists various meter parameters and their current values. To the right of the table are buttons for "Close", "Meter", and navigation arrows labeled "Prev" and "Next".

Item Description	Value
Station ID	TOTALFLOW
Device ID	AGA3
Collection date/time	2/06/2009 14:08:52
Firmware Part Number	2102861-011
Software revision	
----- Current Values -----	
Current Measured Static Pressure (PSIA)	14.730
Current Diff Pressure (In H2O)	0.000
Current Flowing Temp (Deg F)	60.000
Battery (Volts)	0.000
Flow Rate (MCF/Day)	0.000

## Operations

### Polling/Collecting Historical Data

The following instructions detail the steps necessary to collect historical data from flow computers in the field. Additionally, the instructions also cover how to output the files into archive files and long term database.

**FYI**



Before continuing, ensure that the meter ID has been built and remote communications have been tested.

### **Step 6** Setup Historical Data Collection

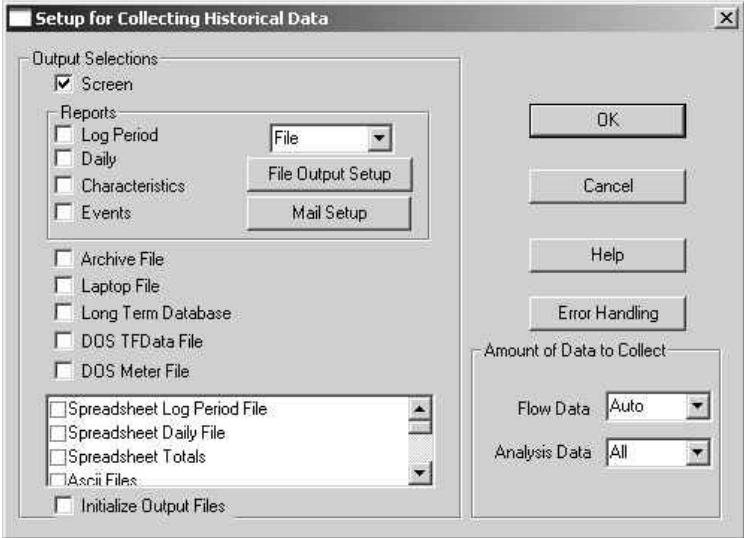
**6A** Click the Remote icon from the menu bar, and select History from the drop-down menu. In the Setup for Collecting Historical Data dialog box, the user can establish the output parameters for the historical data that they are choosing to collect.

**6B** In the Reports section, the user can select the following from the drop-down menu: File, Printer or Email.

If selecting File, the user needs to click the File Output Setup button, and browse to the location where they want the file to be saved.

If the user selects Email, click the Mail Setup button. This will allow the user to setup the email address where the file can be sent.

Additionally, the user should select the report type by clicking in the corresponding checkbox.



**6C** The user also selects the output type. Select the corresponding checkbox such as Archive File, Laptop File or Long Term Database.

**6D** Finally, the user should select the report output style. These selections include various spreadsheets as well as ASCII and other pre-defined file types. Click the OK button.

If Screen Output was selected, the report is displayed. The user may navigate through the various tabs to view the collected information. Based on the output that was selected, the user can then go in and edit the fields.

AGA3 - TotalFlow (Remote Collect)						
Daily Flow Data   Log Period Data   Events   Characteristics   Daily Flow Detail   Log Period Detail						
Date	SP (PSIA)	Tf (Deg F)	Volume (MCF)	Energy (MMBTU)	Integral	FlowTime %
12/19/2008	14.730	60.000	0.000	0.000	0.000	0.000
12/20/2008	14.730	60.000	0.000	0.000	0.000	0.000
12/21/2008	14.730	60.000	0.000	0.000	0.000	0.000
12/22/2008	14.730	60.000	0.000	0.000	0.000	0.000
12/23/2008	14.730	60.000	0.000	0.000	0.000	0.000
12/24/2008	14.730	60.000	0.000	0.000	0.000	0.000
12/25/2008	14.730	60.000	0.000	0.000	0.000	0.000
12/26/2008	14.730	60.000	0.000	0.000	0.000	0.000
12/27/2008	14.730	60.000	0.000	0.000	0.000	0.000

## Trending

The following information details the set up for trending. This includes set up for both the flow computer and WinCCU. The flow computer has the built-in capability to store flow data. Trending allows the user to keep track of the changes to specific points at a specific time interval. Additionally, the user can upload, download and edit this information.

### Step 7 FCU Trend Set Up

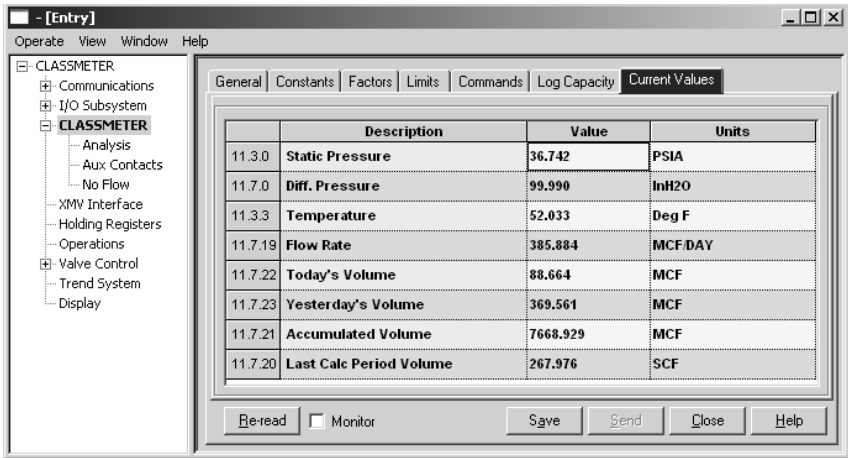
- 7A** In WinCCU, click the ID Manager icon, and select Edit ID from the drop-down menu. In the Edit a Device ID dialog box, ensure that the Register Based Device checkbox, under Options, is checked. Click the OK button.
- 7B** Click the Remote icon, and select Configure from the drop-down menu. The user should now be connected to the flow computer remotely.
- 7C** Select the meter ID from the tree-view and then select the Applications tab. Move to slot 21, and select Trend System from the drop-down menu. Click the Send button. The Trend System application should appear in the tree-view.
- 7D** Click the established measurement tube (not the Station ID), and expand the tree-view. From the available tabs on the right, select Current Values.

**FYI**



Make note of the App/Array/Reg for:

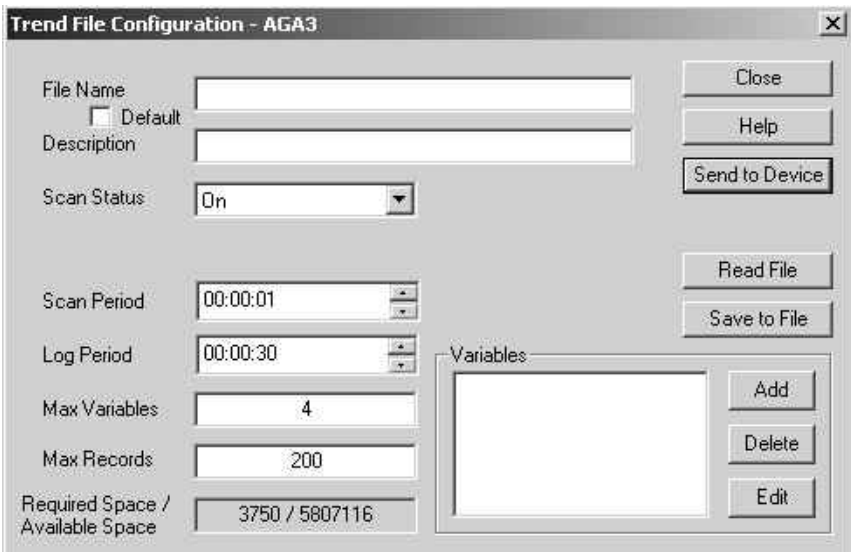
AP \_\_\_\_\_ DP \_\_\_\_\_  
 RTD \_\_\_\_\_ Flow Rate \_\_\_\_\_




**7E** Close the FCU configuration window.

## **Step 8** WinCCU Trend Set Up

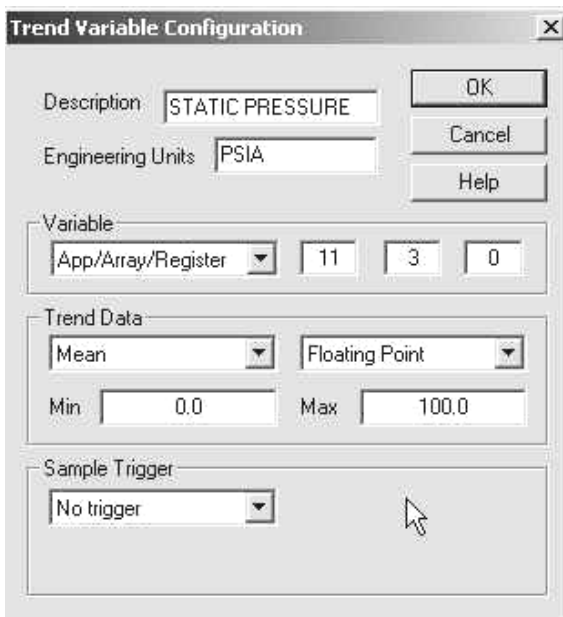
**8A** From the main screen, click the Trending icon, and select Configure Trend from the drop-down menu. In the Configure Device Trend dialog box, click the Next button. The Trend File Configuration dialog displays.



- 8B** Assign a file name and description in the corresponding fields. Click the Add button. A new dialog box displays.

**TIP**  For the purposes of this example, the following will trend the static pressure.

- 8C** In the Description field, type in Static Pressure and PSIA for the Engineering Units. Under Variable, ensure that App/Array/Register is selected from the drop-down menu, and enter the App/Array/Register number in the fields to the right. Under Trend Data, assign a minimum value of 0 and a maximum value of 100. Click the OK button.

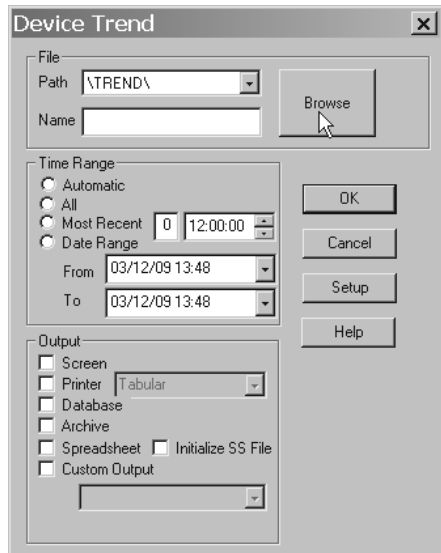


- 8D** Return to Step 8B and repeat steps 8B and 8C for each item to trend. In this example, those may be DP, Temp and FR.
- 8E** After all the variables have been added, click the Save to File button. Note the directory and name of this file.
- 8F** Click the Save button to save the trend file to the selected directory.

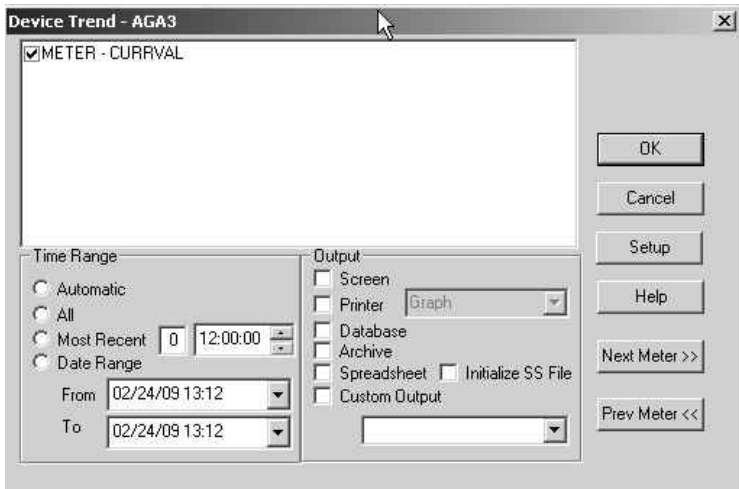
- 8G** Click the Send to Device button to send the file to the flow computer.

## **Step 9** View Trend File

- 9A** To view the trend, click the Trending icon, and select Device Trend from the drop-down menu. When the Device Trend dialog box displays, click the Browse button. This reads the flow computer's trend file and should receive the trend file that the user just sent.



- 9B** In the new window, ensure that the trend file is selected. Select a time and date range, and place a check in the Screen checkbox. Click the OK button to collect the trend file. The trend file displays in graph and tabular form.



## Reports

Reports can be generated from PCCU data collection, laptop file utilities, archive file utilities and long term database utilities. The data that is gathered comes from the utility that calls for it. Archive and long term data may contain many collections, whereas laptop and PCCU data are single collections. The user is given the ability to select from pre-configured reports or create a custom report via the New Report button. Once created, this newly created report will be displayed with the standard reports. Invalid reports for a particular data source are grayed out and may not be selected.

### **Step 10**    **Generate a Standard Report**

**10A** From the Home screen, click the Archive icon, and select Reports from the drop-down menu. In the Reports dialog box, expand either the Meter Report or Summary Report option. The various reports under each caption display. Select the corresponding report(s) by placing a check next to it. Select a time frame by clicking in the Last radio button and entering the number of days back that the user wants the report to collect data, or, the user can select the Date Range radio button, and specify a start and stop date for data collection.

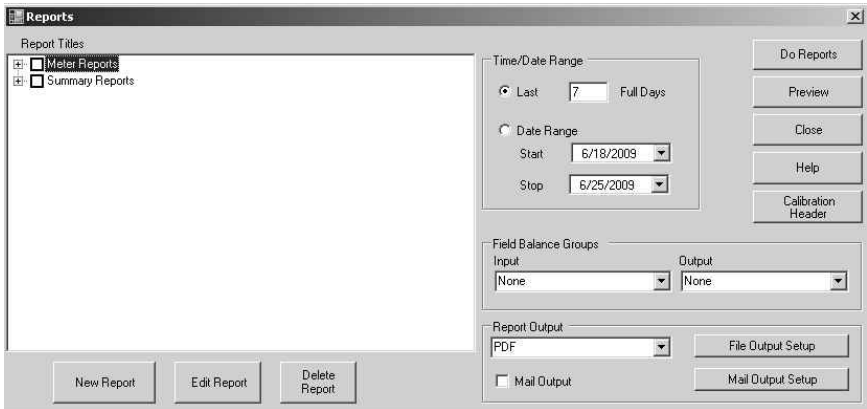
**10B** In the Report Output section, the user can select the type of file output format from the various options presented in the drop-down menu.

If selecting File, the user needs to click the File Output Setup button, and browse to the location where they want the file to be saved.

If the user selects Email, click the Mail Setup button. This will allow the user to setup the email address where the file can be sent.

Once finished, click the Do Reports button. This generates the report.





## **Step 11**      **Generate a Custom Report**

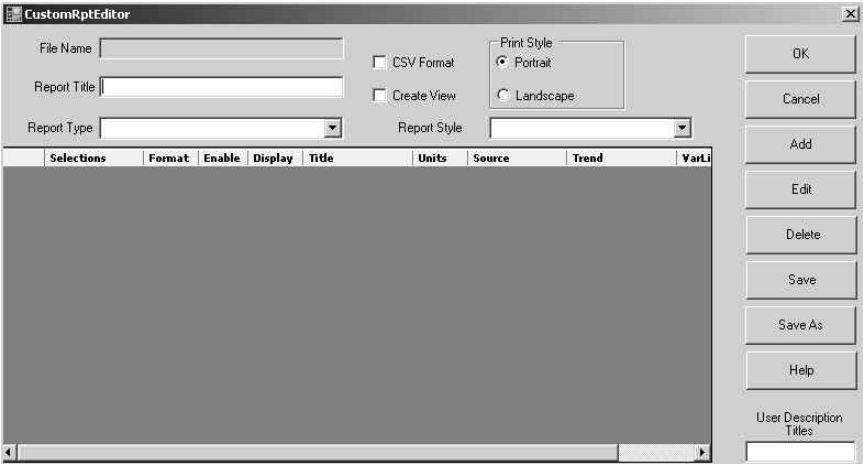
**11A** From the Home screen, click the Archive icon, and select Reports from the drop-down menu. In the Reports dialog box, click the New Report button. In the CustomRptEditor dialog box, assign a title, up to 25 characters long, in the allotted field.

**11B** Determine the desired output.

If the user wants to output a spreadsheet, place a check in CSV Format checkbox.

If the user wants the report added as a tab to the View option of the Laptop and Archive File Utilities, as well as the Edit view of the Meter File Utilities, place a check in the Create View checkbox.

Select the desired print style, report style and report type from the respective drop-down menus. Click the Add button.



**11C** In the Report Field Editor dialog box, select the field name by clicking on it in the Field Name section.

**11D** The Format field shows the way the value is represented. The default of 8.2 establishes that eight total places are allowed with two spaces following the decimal.

**FYI**



Do not use formatting values larger than required to represent the value. If no value is required, leave the decimal out.

- 11E** In the RPT Units field, enter the engineering units. The engineering units will be displayed in a row below the title once the cursor is located in the field.
- 11F** In the Title field, assign a title that represents the variable.
- 11G** In the Display field, select either Avg or Total Avg from the drop-down menu. Avg averages like variables of all selected meters, while Total Avg. sums like variables of all selected meters.
- 11H** Under Variable Calculations, specific range limits may be placed on the variable by placing a check in the Var Limit checkbox and entering a value in the Var Amount field. This is a  $\pm$  value. Variables that are outside the range have an \* displayed by the title. Click the OK button to return to the main Report Editor screen. A new row with the variable is added. Click the OK button. A dialog box prompts the user for a report title. Enter a name, and click the Save button.



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