## Question:

How do I set the display on the SONARtrac transmitter to read million cubic feet or million cubic meters per day?

## Answer:

The CiDRA flow meter measures process fluid velocity (feet or meters per unit time) and then calculates the volumetric flow (cubic feet or cubic meters per unit time based on the process pipe inner diameter. The flow rates are measured in "actual" (at process conditions) units of measure such as actual cubic feet or cubic meters per unit time. The conversion to "standard" units of measure based upon process pressure, temperature, and compressibility factor are made in the process data system; not in the SONARtrac Transmitter.

The following example will set the flow rate to million cubic feet per day. To set the value to million cubic meters change steps 9 and11 below as appropriate. To select alternate units of time change step 7 as appropriate.

1. Get appropriate Hot Work Permit if required. Notify the process operator that the system will be off line for a short period of time.
2. Open the SONARtrac Transmitter door. Close the transmitter door when finished.
3. Press the Down Arrow 4 times until CUSTOMIZE appears on Line 1. Press the Enter Key.
4. Press the Down Arrow until >FLOW UNITS appears on Line 2. Press the Enter Key and >VOLUME will appear on Line 3. Press the Enter Key.
5. Press the Down Arrow until 'user' appears on Line 4. Press the Enter Key.
6. Press the Down Arrow until >TIME appears on Line 3. Press the Enter Key.
7. Press the Down Arrow until 'd' appears on Line 4. Press the Enter Key.
8. Press the Down Arrow until >USER VOL LABEL appears on Line 3. Press the Enter Key.
9. Scroll through the values using the 4 Arrow Keys and set 'Mcf' on Line 4 (up to 3 characters can be selected). Press the Enter Key.
10. Press the Down arrow until >USER VOL BASE appears on Line 3. Press the Enter Key.
11. Press the Down Arrow until 'ft3' (cubic feet) appears on Line 4. Press the Enter Key.
12. Press the Down Arrow until >USER VOL SCALE appears on Line 3. Press the Enter Key.
13. Scroll using the Right and Up/Down Arrows and change 'e+00' to read 'e-06' (conversion to million). Press the Enter Key.
14. Press the Exit Key and the transmitter will restart. Line 1 will have the units of 'Mcf/d'

To set the totalizer units:

1. Press the Down Arrow until CUSTOMIZE appears on Line 1. Press the Enter Key.
2. Press the Down Arrow until >TOTALIZER appears on Line 2. Press the Enter Key.
3. Press the Down Arrow until >UNITS appears on Line 3. Press the Enter Key.
4. Press the Down Arrow until 'Flow Volume Units' appears on Line 4. Press the Enter Key.
5. Press the Exit Key and the transmitter will restart. Line 2 will have the units 'Mcf'.

Please contact CiDRA Customer Support for additional information or with questions.

# Revision History

| Rev | Date | Changed By | Approved By | Change Description |
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| 01 | 05Jun08 | Markoja | Markoja | Initial Release |
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