

Totalizer

Accumulation of the total flow in, volume using standard cubic feet (SCF) and standard cubic meters (SCM) or mass using pounds (lb) or kilograms (kg), can be accessed via the LCD display in display mode or via a [Modbus register](#). The elapsed time in minutes since the last reset is also available. The totalizer can be manually reset from program mode or automatically at a pre-defined value like an electric utility meter or mechanical counter that rolls back to zero when it reaches its limit.

Accuracy Limits

There are only about 7 significant digits for the totalizer so when the value has been accumulating for a long time, it will mistrack due to round off errors. To keep the mistracking errors below 1%, the totalizer must be reset every two years. This is independent of the flow rate; it depends only on the time since the last reset. The best way to deal with this mistracking issue is to select an automatic rollover value that will occur within two years.

For example, say your typical flow rate is 100 SCFM. You have this flow for 10 hours/day. So your total flow per day is $100 \times 10 \times 60 = 60,000$ CF. In 1 year we could accumulate $60,000 \times 365 = 21,900,000$ or 21.9 MCF per year. If the auto reset was at 10 MCF, then about every 6 months it would reset to zero and it would be easy compute the usage using this convenient decade value of 10 MCF after a rollover.

LCD viewing of the Total

To see the totalizer in *Display Mode*, press **D** consecutively, until you see the following display:

SCF= XXXXXX.X ET=XXXX.XXX MIN

This example shows standard cubic feet but it could be metric or mass depending on how the meter was configured. Pressing **H** will hold the display on this menu screen or **C** will clear out of it back to the executive scroll.

Totalizer Reset

To clear the totalizer value and its elapsed time, enter *Program Mode* with the tech access code and press the **P** key until the screen below is reached:

PRESS P TO SET TOTALIZER

Next, press **E** and the subsequent screen is where you can select Manual Reset or

Automatic Reset.

```
TOTALIZER IS ^v
MANUAL RESET
```

Manual Reset is selected by pressing the **E** key you then see:

```
RESET TOTAL NOW?
^=YES  v=NO:  NO
```

You press the **^** key to select yes then **E** to reset the totalizer. It will confirm the reset:

```
TOTALIZER IS
RESET
```

If you want to do the automatic reset, at the first selection menu you press the **^** or **v** key until you see the following screen. Press **E**.

```
TOTALIZER IS ^v
AUTOMATIC RESET
```

The next screen is:

```
AUTO-RESET COUNT
IS 1.000E+14 SCF
```

The number is entered by typing on the keyboard. Once you exceed the 8 character entry field, the **^** and **v** keys will move the decimal point one decade up or down in value. The units will shift from the base, say SCF to MSCF for million, GSCF for giga or billion, then after that it will show in scientific notation, 1.000E+12 SCF.

Chapter H