

ScreenMaster SM500F

Field mountable paperless recorder



Regular totalizer pulse output

Measurement made easy

Configuring the SM500F totalizer pulse output

Introduction

A common requirement for a continuous totalizer is to trigger a relay pulse every X liters or gallons, typically to drive an external mechanical totalizer.

This can be achieved easily by configuring the totalizer in the normal way and then configuring the relay to operate on a **Totalizer Count Pulse**. This triggers the relay for 100 ms every time the integer value of the totalizer changes.

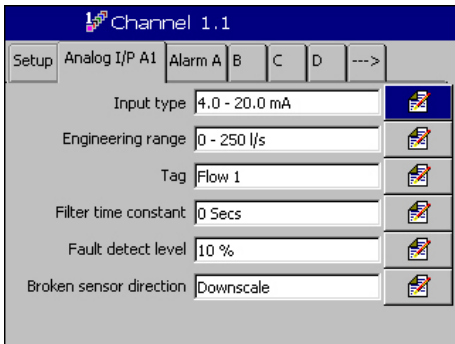
Configure the totalizer

Example. If a flowmeter has a 4 to 20 mA output relating to 0 to 250 l/s and a relay pulse every 1000 liters (1 kl) is required, the totalizer must be configured to count in 1000s liters (kl).

To configure the totalizers:

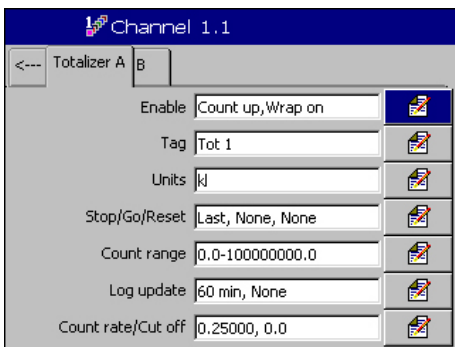
1 Configure the input channel:

- a Set **Input type** to 4.0-20.0 mA.
- b Set **Engineering range** to 0-250 l/s.

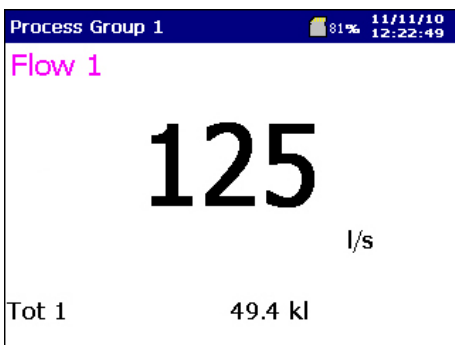


2 Configure the totalizer:

- a Set **Units** to kl.
- b Set **Count range** to 0.0-100000000.0.
(**Note.** The count resolution of 1 decimal point equates to 100 liters).
- c Set **Count rate/Cut off** to 0.25000 (for **Example** above).

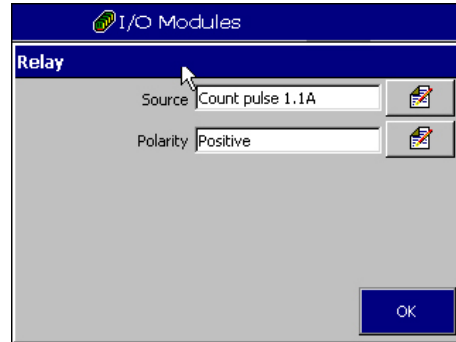


This converts the flow rate in l/s to kl total flow:



3 Configure the relay:

- a Set **Source** to **Count pulse X.X** where X.X is the number of the channel configured in steps 1 and 2.



Count pulse is an internal function that energizes the relay for 100 ms every time the totalizer value increases (for example from 234.9 kl to 235.0 kl).

4 Start the totalizer.

Note. A totalizer value displayed in red in the indicator view indicates that the totalizer is not running.

Notes

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