

## Description

The Model 53 Electronic Totalizer with 7 or 8 LCD digits is ideal as a replacement for electromechanical totalizers or where external power is not available. Powered by an internal lithium battery these products are highly reliable and provide the user with a choice of several options; with or without reset and multiple count ranges for optimized performance. The case is available in either tan or black.

## Features

- Lithium battery
- Choice of non-reset or remote reset
- Switch (no-voltage), 3-30VDC, 20-250VAC/VDC


## Specifications

| Figures: | 7 or 8 LCD figures, 0.32 "  high | Weight | 2 oz. [57g] |
| :---: | :---: | :---: | :---: |
| Reset: Speed: | Remote, manual, and non-reset | Temperature: |  |
|  |  | Operating: | $-4^{\circ} \mathrm{F}$ to $+140^{\circ} \mathrm{F}\left[-20^{\circ} \mathrm{C}\right.$ to $\left.+60^{\circ} \mathrm{C}\right]$ |
|  | 0-40 counts/second [min. 12.5 ms - on, 12.5 ms - off] | Storage: | $-40^{\circ} \mathrm{F}$ to $+165^{\circ} \mathrm{F}\left[-40^{\circ} \mathrm{C}\right.$ to $\left.+75^{\circ} \mathrm{C}\right]$ |
|  | $0-150$ counts/second [min. 3.3 ms - on, 3.3 ms - off] | Humidity: | 0 to $95 \% \mathrm{RH}$, non-condensing |
| 8 Digit: | $0-35$ count/second [min14.3ms - on, 14.3ms - off] | Vibration |  |
| Inputs: | Switch (no-voltage), 3-30VDC, 20-250VAC/VDC | Operating: | 10 to $55 \mathrm{~Hz}, 0.01$ "  double amplitude |
|  | Vih 20VAC/3VDC minimum | Non-Operating: | 10 to $55 \mathrm{~Hz}, 0.03$ "  double amplitude |
|  | Vil 3VAC/1VDC maximum | Shock |  |
| Power: | Self-powered (internal lithium battery) | Operating: | 10G |
| Mounting: | Panel with clip | Non-Operating: | 30G |
| Terminations: | Terminal block, or connector with 8 " | Dielectric: | 1000VAC 50/60Hz for 1 minute |
|  | wire leads | Accuracy: | 100\% [Provided Signal Meets Stated Parameters] |
| Battery Life: | ~20years | Approvals: | UL Recognized, CSA Certified, CE Compliant |

Note: When interfacing the Model 53 with a Solid State Relay or AC Sensor, the leakage current needs to be considered. Contact the factory or see the application note at www.redingtoncounters.com for further information.

## Models

| Models | Reset |  |  | Input |  |  | Speed/cps |  | Terminations |  | Color |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | remote | none | manual | switch | 3-30VDC | 20-250VAC/VDC | 40/150 | 40 | term. block | 8" wire leads | Tan | Black |
| 5300-0000 | X |  |  | X |  |  | X |  | X |  | X |  |
| 5300-0001 | X |  |  | X |  |  | X |  | X |  |  | X |
| 5300-0100 | X |  | X | X |  |  | X |  | X |  | X |  |
| 5300-0101 | X |  | X | X |  |  | X |  | X |  |  | X |
| 5300-1000 | X |  |  |  | X |  | X |  | X |  | X |  |
| 5300-1001 | X |  |  |  | X |  | X |  | X |  |  | X |
| 5300-1100 | X |  | X |  | X |  | X |  | X |  | X |  |
| 5300-1010 | X |  |  |  | X |  | X |  |  | X | X |  |
| 5300-1011 | X |  |  |  | X |  | X |  |  | X |  | X |
| 5300-2000 | X |  |  |  |  | X |  | X | X |  | X |  |
| 5300-2001 | X |  |  |  |  | X |  | X | X |  |  | X |
| 5300-2100 | X |  | X |  |  | X |  | X | X |  | X |  |
| 5300-2200 |  | X |  |  |  | X |  | X | X |  | X |  |
| 5300-2201 |  | X |  |  |  | X |  | X | X |  |  | X |

* Items in bold are normally in factory stock.

All part numbers shown are for 7 digit models. Please contact the factory for information on 8 digit models.

## Dimensions



## Operating Instructions



## NOTES:

## INPUT / RESET PARAMETERS

To insure proper performance from totalizers the following minimum input durations are required:

| 0 to 35 cps totalizer | Minimum | 14.3 ms "on" | 14.3 ms "off" | The count is activated on the falling edge. |
| :--- | :--- | :--- | :--- | :--- |
| 0 to 40 cps totalizer | Minimum | 12.5 ms "on" | 12.5 ms "off" | The count is activated on the falling edge. |
| 0 to 150 cps totalizer | Minimum | 3.3 ms "on" | 3.3 ms "off" | The count is activated on the rising edge. |

All resettable totalizers can be reset by a pulse with a minimum duration of 6 milliseconds

## DUAL RANGE TOTALIZER PROTECTION FEATURE:

Dual range totalizers have a built-in range protection feature. This feature will protect the totalizer from receiving a false signal from the unused input line. Once a totalizer has received an input from pin \#1 or pin \#2, it will only accept inputs from that pin until the unit has been reset. For example, if a totalizer is run in the low speed range and it is determined that a high speed range is preferred, simply switch the input from pin \#2 to pin \#1 and reset the totalizer to de-activate this range protection feature. Conversely, if a totalizer is run in high speed range and it is determined that a low speed range is preferred, simply switch the input from pin \#1 to pin \#2 and reset the totalizer.

## SPECIAL WIRING OPTION

There is an internal connection between pin 3 and pin 5 , a single wire can be used by connecting it to either pin 3 or pin 5 . This option does not apply for units with input of 20-250VAC/VDC or manual reset enable.

## OPTIONAL INPUTS:

Optional control circuity (such as transistors) may be used as inputs provided that such circuitry provides the required parameters of the model used.

## Applications



