# 9100 Series

## Predetermining Counter / Ratemeter



**The versatile 9100 multi-function instrument is a multi-preset, totalising counter / ratemeter with backlit display.**

Simultaneous operation in different modes is now possible with this recent development of the highly successful 9100 multi-function counter. Additional enhancements include 3-line display, more keys, enhanced programming, EEPROM memory avoiding the need for a battery, and on-screen programming prompts in four languages.

The 9100 carries out rate measurement, batch counting and totalising simultaneously. Rate mode is signified by an R appearing at the top left hand corner of the display and counting carries on in the background. The first line of the display shows pulses per minute (PPM) unless a prescaler is in use.
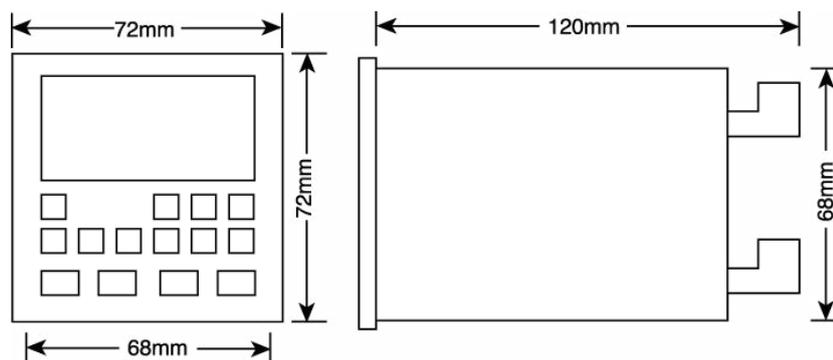
## Key Features

- Simultaneously maintains any 3 of the following: Count preset, count pre-warn, batch preset, overspeed, underspeed condition and displays count, total and speed
- Counts in any of 7 modes: A-B, A+B, A/B, count and direction and quadrature x1, x2 and x4
- EEPROM retains program and data for 40-years with no power
- 3-line Supertwist LCD display viewable from any angle
- Easily programmed in English, German, French or Spanish using simple menu structure and 10-key keypad
- Counting continues while rate measurement is in progress
- Accurate enough for position sensing and robotic control

- Displayed values, choice of engineering units and 12 characters of user programmable text can be printed directly from the IBM/Epson compatible serial printer port
- Can be powered from 85-265VAC for world-wide use
- Multiplying and dividing prescalers enable display directly in the required (engineering) units
- Manual, remote and automatic resets available
- Remote inhibit and remote keyboard disable
- Fast electronic or slow contact closure inputs, all with optical isolation. Contact closure inputs are debounced
- Auxiliary 12VDC 100mA power output to power sensor
- Environmental protection to IP65/NEMA4X
- CE approved

## Specifications

| | |
|---|---|
| **Supply Voltage** | 85 - 265VAC or 10 - 26VDC at 100mA |
| **Auxiliary Output Supply** | 12VDC ± 10% @ 100mA (when operating from AC supply) |
| **Display** | 2 rows of 6 digits, supertwist LCD with yellow/green LED backlight. Upper row 7mm (0.28in) high indicates count, lower row 4mm (0.16in) high indicates P1 preset point. Also Relay Active annunciator |
| **Backlight Control** | Programmable to Always ON, Always OFF or AUTO (ON for 30s following last keypress) |
| **Preset Points** | User selectable preset point 1 - 999999 |
| **Count Inputs** | High Speed NPN/PNP Opto-isolated 10 - 30VDC. Maximum input frequency 10kHz Low Speed Opto-isolated 12 - 260VAC/DC. Maximum input frequency 30Hz |
| **Prescaler** | Multiply 0.00001 - 9.99999, default 1.00000 Divide 1 - 99999, default 00001 |
| **Manual Reset** | Can be disabled on installation or remotely |
| **Remote Reset** | Contact closure or pulse (minimum pulse duration 34msec) |
| **Automatic Reset** | Programmable for automatic or Manual/Remote reset |
| **Data Retention** | 40-years minimum |
| **Output Relay** | Contact Connection SPDT Contact Rating 5A 260 VAC 30 VDC 1300 VA/150 W |
| **Operating Temp** | -10°C to +60°C [14°F to 140°F] |
| **Storage Temp** | -20°C to +70°C [-4°F to 158°F] |
| **Environmental Protection** | IP65 (NEMA4X) when properly installed using the sealing gasket supplied (without bezel) |

## Dimensions



## Ordering Information

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