VEEDER-ROOT brand

Electronic Predetermining Counters

7910 Programmable



Powerful and flexible . . . with features to solve your most demanding application problems

Specific Models





Designed for industrial machine and process control applications, the Series 7910 provides a full complement of programmable features including bidirectional counting modes, programmable output logic and hold times, and RS-422 or RS-232 data communications. A unique dual-counter-mode lets the Series 7910 replace the functions of two predetermining counters in some applications.

- Two high-speed counting registers with separate calibration factors
- Quick and easy setup using built-in "library" of popular programs
- Add/subtract, count/direction, or quadrature bidirectional input modes
- Big, bright, high-contrast red LED display
- Control outputs from two 5 amp rated relays, plus solid state outputs
- Nonvolatile memory for all programmed, preset, and counted data
- Sealed, NEMA-4 rated front panel; dust- and water-tight
- Direct access keys for all operating functions no "shifts or scrolls"
- Data communications port for printer or computer interface
- Built-in self-diagnostics and power line fault detection

Among the Series 7910's convenience oriented features are rugged screw-terminal strips for easy wiring, 115/230 VAC dual operating voltage, and a regulated DC voltage output with enough capacity to support two encoders.

Calibration: Separate input scaling for count registers A and B; Range: 0.0001 to 9.9999

Preset Limits: 2 individual, 6 digits each; may be individually assigned to count register A or B

Preset Modes: Up Mode: Resets to zero, processes presets when count matches limit value; Down Mode: Resets to preset limit value, outputs are actuated at zero and second preset limit (if used); Totalizer Mode: Count register A or B can operate as totalizer if not assigned preset limit

Counting Modes: Add/add, add/subtract, count/direction, quadrature Input Logic: X1, X2, X4 (quadrature only)

Count Rate: Maximum 10 kHz count rate with single input driven, 7.5 kHz with both inputs driven

Signal Inputs: Open collector (sinking), or contact closure (programmable input filter)

Control Inputs: Reset A, reset B, and stop count (commands initiated when switched to common)

Control Outputs: 2 form-C relays, rated at 5 amp/230 VAC, maximum; 2 NPN transistor (sinking); 30 VDC/150 mA, maximum

Reset: Front panel push-button, remote, programmable automatic
Security: Selectable locks for reset, preset, and program mode
Diagnostics: Tests for control inputs, outputs, panel keys, and display
Communications: RS-422, RS-232, See ordering table; 7 bit ASCII plus
parity; Baud rate to 2400

Operating Temperature: +32° to +122°F (0 to +50°C)

Weight: 2.5 lbs. (1.1 kg)

SPECIFICATIONS

Input Power: Selectable 115/230 VAC, 50/60 Hz, 20 VA maximum Accessory Power: DC output provided for transducer, 15 VDC ±5%, 160 mA maximum

Display: 6 digit, 0.56" (14.2 mm) red LED **Decimal Point:** Selectable decimal point location

Keyboard: Sealed membrane; rated NEMA-4 when unit is panel mounted with gasket provided

Configuration: Two separate 6 decade counting registers with assignable preset limits, and operating modes

Model No.	Description
791086-210	UL/CSA, RS-422 Data
791086-220	UL/CSA, RS-232 Data



