

Dual Channel Counter/Rate Monitor

Count Parts, Measure Frequency, Keep Totals, Track Batches or Production Rate & Quantity



Only
\$245
(Base Unit)

- Each Channel programmable as Counter, Rate, RPM or Frequency indicator.
- Flexible scaling on individual channels for displaying process in engineering units.
- Six different up/down counter modes with a maximum count of 9,999,999.
- Works as a totalizer and batch counter.
- Programmable time base for rate.
- Displays frequency in 0.01Hz resolution.
- Auto/manual scanning with HOLD feature.
- Two relays and one audio/visual output per channel (optional).
- Output status indication on front panel.
- Keeps track of process run time.
- Built-in buzzer (with alarm option).
- Captures Min/Max readings.
- Shows channel differentials (C1-C2, C2-C1).
- Built-in Power line filter for high reliability in harsh industrial environment.
- Security password for preventing unauthorized program changes.

DESCRIPTION The DCR series offers two very flexible counter channels in a single unit. Either one of these two channels can be configured to work as up/down Counter, Rate, RPM or Frequency monitor. Given below is a brief description of various modes that the unit can operate in:

COUNTER MODE: In counter mode, each channel may be configured as an up or down counter with auto/manual reset or preset. Three preset limits may be operated with built in delay timers. A seven digit display permits a maximum count of 9,999,999 at a frequency of up to 1 MHz. Following are the six different counting modes:

1. Count up with non-latching outputs
2. Count up with latching outputs
3. Count up with output delay timer.
4. Count up, auto reset & output delay timers
5. Count down with manual preset.
6. Count down, auto preset & delayed output

RATE MODE: As a rate indicator, each channel features crystal controlled accuracy and provides the flexibility of a programmable time base for sampling. Time base can be set from 0.100 to 9999.999 seconds, in increments of 0.001 second. A rate gain feature allows for quick update on rates with longer time bases.



For further information, contact:
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RPM MODE: In this mode, the unit counts incoming pulses and displays the data as revolution per minute. A filter feature is used to smooth out rapidly changing data, or to view rapid speed changes.

FREQUENCY MODE: In this mode an internal crystal reference is used to indicate the frequency of incoming pulses. Measured frequency range is from 2 Hz to 2MHz. Two modes of operation are supported:

1. High frequency mode (resolution = 1 Hz)
2. Low frequency mode (resolution = 0.01 Hz)

TOTAL/BATCH CONTROLLER: The unit works as

a totalizer by accumulating incoming or scaled pulses. It also keeps a count on number of batches run. Additionally, two outputs can be configured to provide a control signal when a preset total or batch count is achieved.

Additional features include tracking of Min/Max readings in all modes. A built-in buzzer sounds an alarm whenever a limit is reached. Visual indication of relay output status is given by LEDs on the front panel. The unit has a watchdog timer and a power line filter designed in to provide trouble free operation in harsh industrial environment.

SPECIFICATIONS

INPUT SIGNAL:

- * Input accepts pulses or square wave.
- * Schmitt trigger on input:
 - Input low = 0.0 Vdc, min. 0.6 Vdc, max.
 - Input high = 2.5 Vdc, min. 5.0 Vdc, max.

RPM/COUNT/RATE/FREQUENCY LIMITS:

- * RPM range: 1- 999,999 RPM
- * COUNT range: 1 - 9,999,999 counts
- * RATE range: Varies with time-base --- 9,999,999 max.
- * Rate Time base: 100 milliseconds to 9,999.999 seconds
- * Time base increment: 1 millisecond (0.001 second)
- * High frequency range: 2 Hz to 2 MHz
- * Resolution in high frequency mode = 1 Hz.
- * Low frequency range: 2.00 Hz to 5000.00 Hz.
- * Resolution in low frequency mode: = 0.01 Hz.

DISPLAY:

- * Red 7-segment LED display, 0.39 inch (10mm) height
- * Negative polarity indication Over-range indication
- * Display test: Briefly indicates 8.8.8.8.8.8. on power up

ELAPSED TIME:

- * Displayed in hours, minutes & seconds. Display format: HHH.MM.SS

POWER OPTION:

- * 120VAC -- 60 Hz (Standard)
- * 220VAC -- 50 HZ (Optional)
- * 8VDC -- 12VDC @ 900ma (optional)

RELAY/OPEN COLLECTOR OUTPUT:

1. Open collector - 4 open collector outputs, maximum sink capability of 50ma per output
 2. Relays: Single pole single throw, 1 Amp @ 28Vdc or 0.5 Amp @ 120Vac resistive
- Output termination: Euro-style pluggable connector
- * Outputs programmable as normally open , normally closed, latching or non latching.

LIMIT DELAY TIMERS:

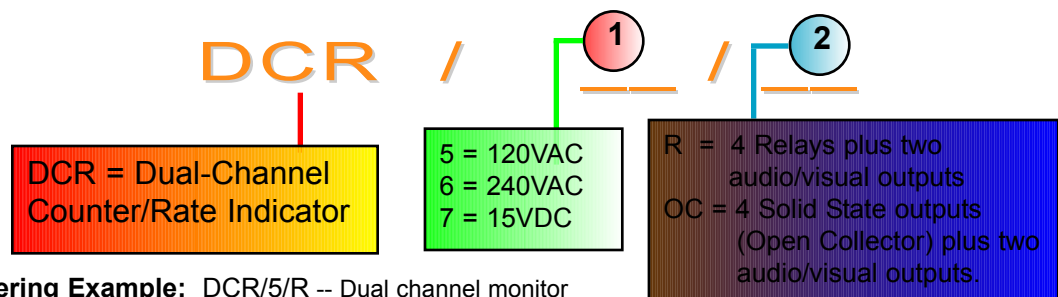
- * Programmable in seconds --- Maximum time: 9999 seconds.

DIMENSIONS:

- * Case: 3.60" x 1.75" x 8.5"
- * Bezel size: 4/40" x 2.25" x 0.45"

Ordering Guide

To find a model number, fill in blanks 1 and 2 with appropriate selection. Refer to ordering example below:



Ordering Example: DCR/5/R -- Dual channel monitor with Pulse inputs, 120vac Power and relay output option.