

# MODEL 714AN QUADRATURE BI-DIRECTIONAL COUNTER



## FEATURES

- **Optional 2 Limit set points**
- **Programmable decimal points**
- **Quadrature counting input:(X1, X2 or X4)**
- **Z Reference input**
- **Optional RS-232 or RS-485 interface**
- **Optional analog out, (0-10 volts or 4-20 mA)**
- **Front panel and remote inputs for start, stop and reset**
- **Programmable fractional input multiplier (0 to .9999)**
- **500Khz count rate**
- **All aluminum case size "A"**
- **6 digit .56" red alphanumeric LEDs**
- **I/O Screw Terminal connector**
- **Excitation Output 5VDC**
- **Through zero counting and indication**

Designed for the industrial environment the Model 714AN quadrature counter has many standard and optional features. In addition customized features are available to meet your unique requirements. The standard unit counts from a quadrature count sourced by an optical or magnetic encoder. Differential or complementary input can be accomplished with option 11. A four digit fractional multiplier can be programmed via the front panel switches.

## SPECIFICATIONS

**Accuracy:**  $\pm 1$  count

**Temperature Range:**  $-20^{\circ}$  to  $+60^{\circ}$  Celsius

**Input Power:** 115VAC, 50-400Hz 8 watts maximum  
230VAC, 50-400Hz 8 watts max (optional)  
5VDC @ 500mA maximum (optional)  
9-18VDC @ 500mA maximum (optional)  
18-36VDC @ 400mA maximum (optional)

**Case size:** "A" (2.5" H X 4.5" W X 5.3" D), 2.25"X4.36" cutout

## INPUTS

**Remote start/stop/reset:** Requires closure to logic common or TTL logic zero. Input loading 1LPTTL load. Stop signal overrides start

**TTL:** and CMOS on-chip filtering. Maximum count rate 500Khz. Input loading 1LPTTL load.

**Differential or complementary:** option 11 accepts Differential or Complementary, inputs.

**Quadrature counting:** User programmable for X1, X2 or X4

**Z reference:** For encoders with Z reference output on each revolution

## OUTPUTS

**Limit Relays:** 2 Form "C" Relays rated at .25A at 28Volts

**Excitation Output:** 5VDC @ 150mA maximum

**Interface:** Optional addressable RS-232 or RS-485, with selectable baud rates of 2.4, 4.8, 9.6, 14.4, or 19.2K

**Analog Output:** scalable, DC maximum current of 5mA  
0-10 VDC, 12 BIT resolution, 4,096 counts 2.45mV (Option 09),  
0-10 VDC, 16 BIT resolution, 65,536 counts 0.15mV (Option 16), or  
4-20 mA, 12 BIT resolution, 4,096 counts .00039mA (Option 08)  
with output max load of 600 ohms

## OPTIONS

- 01 RS-232 serial interface
- 02 RS-485 serial interface
- 05 5Volt DC Input power @ 500mA maximum.
- 08 4-20 mA output max load 600 ohms
- 09 Analog output. 0-10 Volt DC scaleable (12 BIT)
- 10 2 set points with form C relay outputs
- 11 Differential or complementary input
- 12 9-18 Volt DC input power @ 500mA maximum.
- 16 Analog output. 0-10 Volt DC scaleable (16BIT)
- 18 Reset Switch only.
- 19 No front panel switches.
- 22 230 Volt AC 50-400hz 8watts maximum
- 24 18-36 Volt DC input power @ 400mA maximum.
- 25 Logo and/or nomenclature change. (special artwork)
- 26 No logo
- 28 Blank lens
- 36 "COUNTER" legend
- 37 "RPM" legend
- 38 "DEGREES" legend
- XXX = 3 digit # indicates custom software or hardware.

0411

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