

Red Lion Counters & Timers

- Count Speeds up to 10 kHz
- 9 Programmable Timer Ranges
- Eight Digit, 0.35" (9 mm) LCD
- Green or Red LED Backlight
- Contact, Logic, Open Collector or High Voltage Input
- Front Panel or Remote Reset
- Standard Wire Connections or Optional Plug-in Terminal Block
- NEMA 4X/IP65 Front Bezel Fits 1/32 DIN Cutout



▲ **CUB7**

NEW

SPECIFICATIONS

Low Voltage Input:	28 VDC max.
Sink mode:	High >3.0 VDC (internal pull-down), Low <1.5 VDC (internal pull-up), I_{in} 5 μ A max.
Source mode:	High >3.0 VDC (internal pull-down), Low <1.5 VDC, I_{in} 5 mA max.
Count Speed:	10 kHz max with 50% duty cycle, 30 Hz max in Low Frequency mode
Trigger:	Count input counts on negative edge. Timer runs when input is low.
High Voltage Input:	50-250 VDC/VAC 50/60 Hz, I_{in} 5 mA max.
Isolation:	2500 VAC, 1 min.
Trigger:	Count input adds one count with voltage present. Timer runs when voltage is present.
Reset Input:	Active low to clear display to zero (5 msec min.), Low <1.5 VDC (internal pull-up), I_{in} 20 μ A max.
Timer Resolution:	0.001 sec to 1 hr in 9 ranges
Timer Accuracy:	0.025%
Power:	Non-replaceable internal 3.6 VDC lithium battery
Battery Life:	7 years typical continuous operation
LED Backlight:	Requires external supply 6-26 VDC @ 25 mA max.
Temperature:	0 to 50 °C operating, <85% RH (non-condensing)
Connections:	22 gauge wire, wire length minimum 10"
Dimensions:	1.1" H x 2" W x 1.7" D (28x51x43mm)

ORDERING INFORMATION

CUB7CCSO	CUB7 Counter, Low Voltage Input, Reflective Display
CUB7CCGO	CUB7 Counter, Low Voltage Input, Green Display
CUB7CCRO	CUB7 Counter, Low Voltage Input, Red Display
CUB7CVSO	CUB7 Counter, High Voltage Input, Reflective Display
CUB7CVGO	CUB7 Counter, High Voltage Input, Green Display
CUB7CVRO	CUB7 Counter, High Voltage Input, Red Display
CUB7TCSO	CUB7 Timer, Low Voltage Input, Reflective Display
CUB7TCGO	CUB7 Timer, Low Voltage Input, Green Display
CUB7TCRO	CUB7 Timer, Low Voltage Input, Red Display
CUB7TVSO	CUB7 Timer, High Voltage Input, Reflective Display
CUB7TVGO	CUB7 Timer, High Voltage Input, Green Display
CUB7TVRO	CUB7 Timer, High Voltage Input, Red Display (Call for cross reference to old CUB7 model numbers)

Accessories:

TB100003	3 Position Terminal Block for CUB7CCSO, CUB7TCSO
TB100004	4 Position Terminal Block for CUB7CCGO, CUB7TCGO, CUB7CCRO, CUB7TCRO, CUB7CVSO, CUB7TVSO
TB100005	5 Position Terminal Block for CUB7CVGO, CUB7TVGO, CUB7CVRO, CUB7TVRO
ENC13000	NEMA 4X Plastic Enclosure 3.13" H x 3.21" W x 2.16" D
BMK80000	CUB7 Base Mount

Red Lion Counter/ Rate Meters

- Large 6 or 8 Digit LED Display
- Input Rates to 25 kHz
- Programmable Scaling
- Programmable Decimal Point
- Variety of Sensor Inputs
- Sensor Excitation
- AC or DC Powered
- 1/8 DIN, NEMA 4X Front
- Bi-Directional Counting & Remote Reset



▲ **PAX Lite**



The PAX® Lite Counter is a versatile totalizing counter that can be adapted to a wide variety of counting, measuring, and positioning readout applications. The PAX® Lite Rate Meter provides the versatility and flexibility needed to accommodate virtually any rate measuring application.

Both meters can be scaled for direct readout in terms of the units being measured. Each meter is programmed through a combination of front panel buttons and DIP switches. Once the programming is complete, the buttons can be disabled by a DIP switch setting.

SPECIFICATIONS

Input Range:	25 kHz max. (0.01 Hz min. on Rate Meter)
Input:	30V DC max. DIP switch selectable for pulses from a variety of sources including NPN-OC, TTL outputs, and most Red Lion® sensors.
Logic Trigger Levels:	V_L = 1.5 V max.; V_H = 3.75 V min.
Current Sinking:	Internal 7.8 k Ω pull-up to +12 VDC, 1.9 mA max.
Current Sourcing:	Internal 3.9 k Ω pull-down, 8 mA max. @ 30 VDC.
Magnetic Pick-up (Rate Meter only):	
Sensitivity:	200 mV peak
Hysteresis:	100 mV
Input Impedance:	3.9k Ω @ 60 Hz
Maximum Input:	\pm 40 V peak, 30 Vrms
Rate Meter Accuracy:	\pm 0.01%
Control Inputs (Counter Only):	
Functions:	Count Up/Down, Remote Reset, Inhibit, Store
Max. Input:	30 VDC continuous
Isolation:	Not isolated to sensor input common
Logic State:	Active Low, 22 k Ω pull-up to +12 V,
Logic Levels:	Active: V_{in} < 0.9 VDC; Inactive: V_{in} > 3.6 VDC
Response Time:	25 μ sec max. for Up/Down and Inhibit, 10 msec. max. for Reset and Store
Display:	6-digit, 0.56" (14.2 mm) or 8-digit, 0.4" (10.1 mm)
Decimal Point:	Programmed by front panel keys
Power:	115/230 VAC, switch select, 50/60 Hz, 6 VA. 10 to 16 VDC @ 0.1 A max.
AC Power Isolation:	2300V rms, 1 min. to input & DC in/out
Sensor Power:	9 to 17.5 VDC @ 100 mA max.
Temperature:	0 to 60 °C operating, <85% RH (non-condensing)
Connections:	Cage-clamp terminal block
Dimensions:	1.95" H x 3.80" W x 4.1" D (50x97x105mm)

ORDERING INFORMATION

PAXLC600	6 Digit PAX Lite Counter
PAXLC800	8 Digit PAX Lite Counter
PAXLR000	6 Digit PAX Lite Rate Meter

Accessories:

ENC5B000	NEMA 4X Plastic Enclosure 7.4" H x 7.4" W x 5.11" D
ENC5C000	Enclosure for 2 PAX meters 7.4" H x 7.4" W x 5.11" D

Also available:

PAXLCR00	Dual Counter & Rate Meter with Dual Relay Outputs
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