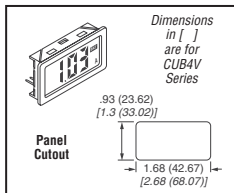




# Miniature Display D.C. Voltmeter



**MDMV Series: SPECIFICATIONS:** • Display: 3-1/2-digit, 0.4" (10.2mm) high digits. A minus (-) sign is displayed when voltage is negative • Decimal Points: Selectable decimal points are activated at the rear terminal pins to allow the display to be read in tenths, hundredths or thousandths • Annunciators: 5 selectable annunciators, BAT, V, A,  $\mu$  and m are activated at the appropriate rear terminal • Power Requirements: 4.8VDC – 6VDC @ 5mA Maximum • Input Range: 0 to  $\pm$ 199.9m VDC • Over-range Indication: Over-range is indicated by a "1" displayed in the most significant digit and the blanking of the three least significant digits • Reading Rate: 2 1/2 readings per second • Common Mode Rejection Ratio: 70dB • Input Impedance: 1000M $\Omega$  • Operating Range: 0°C – 60°C

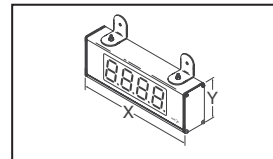
**CUB4V Series: SPECIFICATIONS:** • LCD, positive reflective or negative transmissive with yellow/green or red backlighting • Four selectable D.C. ranges (0-199.9 mV, 1.999 V, 19.99 V, 199.9 V) • 0.6" (15.24mm) high LCD digits • Built-in scaling provided • Auto-zeroing circuit • Selectable decimal points • Wire connections made via screw clamp type terminals • Fits DIN standard cut-out 2.68" (68mm) x 1.30" (33mm) • NEMA 4X/IP65 sealed front panel bezel • 9 – 28VDC powered

| Description                               | Digi-Key Part No. | Price Each |       | Red Lion Part No. |
|---|-------------------|------------|-------|-------------------|
|   |                   | 1          | 5     |                   |
| <b>MDMV Series</b>                        |                   |            |       |                   |
| Panel Mt., Reflective Display             | RLC000-ND         | 40.80      | 39.78 | MDMV0000          |
| Panel Mt., Ylw./Grn. Backlight Display    | RLC010-ND         | 53.60      | 52.26 | MDMV0010          |
| Panel Mt., Red Backlight Display          | RLC020-ND         | 53.60      | 52.26 | MDMV0020          |
| PC Board Mt., Reflective Display          | RLC100-ND         | 37.60      | 36.66 | MDMV0100          |
| PC Board Mt., Ylw./Grn. Backlight Display | RLC110-ND         | 51.20      | 49.92 | MDMV0110          |
| PC Board Mt., Red Backlight Display       | RLC120-ND         | 51.20      | 49.92 | MDMV0120          |
| MDM Cable Assembly                        | RLC70-ND          | 14.04      | 13.69 | HWK70000          |
| <b>CUB4V Series – RoHS Compliant</b>      |                   |            |       |                   |
| DC Voltmeter                              | RLC4V0-ND         | 104.00     | —     | CUB4V000          |
| DC Voltmeter, Ylw./Grn. Backlight Display | RLC4V1-ND         | 115.44     | —     | CUB4V010          |
| DC Voltmeter, Red Backlight Display       | RLC4V2-ND         | 115.44     | —     | CUB4V020          |

RoHS Compliant

## LD Series Large Display Counters and Timers

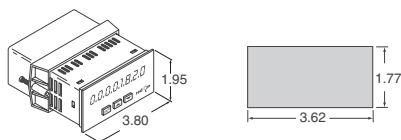
Red Lion's low cost large digit displays are available in either large 2.25" (57.15mm) red LED digit height or very large 4.0" (101.60mm) red LED digit height. Choose either a single counter function or single timer function that is housed in a NEMA 4 case construction and features adjustable brightness control, 85 – 250VAC power input and selectable high or low frequency (0.01 Hz – 35kHz) inputs. Perfect for industrial settings such as factory displays, outside displays or long distance displays.



| Description  | Dimension - Inch (mm) |               | Digi-Key Part No. | Price Each | Red Lion Part No. |
|--|-----------------------|---------------|-------------------|------------|-------------------|
|  | X                     | Y             |                   |            |                   |
| 4.0" (101.60mm) High 4 Digit Red LED Counter, 120VAC | 20.0 (508.0)          | 7.875 (200.0) | RLC118-ND         | 504.40     | LD400400          |
| 4.0" (101.60mm) High 6 Digit Red LED Timer, 120VAC   | 26.0 (660.4)          | 7.875 (200.0) | RLC125-ND         | 660.40     | LD4T06P0          |

## PAX Lite Meters

Dimensions in inches



### PAX LITE DC Current and Voltmeters



PAX Lite Current and Volt Meters are premium quality instruments designed for tough industrial applications. With multi-range capability, built-in provision for scaling, and DIP switch selectable decimal points, these meters offer the ultimate in application flexibility. Two models cover your voltage and current indicator needs. The meter can provide direct readout from pressure, speed or flow transducers, or any other variable that can be translated to voltage or current. The built-in scaling allows the display to be scaled to the desired engineering unit.

**Specifications:** • Power: 115/230VAC, switch selectable, 50/60 Hz • Input Ranges/Resolution: Selectable by jumper connections • Accuracy: • DC Voltmeters: 1 mV, 10 mV, 100 mV or 1 V • DC Current Meters: 199.9  $\mu$ A/199.9 mA, 1.999 mA, 19.99 mA or 1.999 A • Over-Range Indication: on all modes is indicated by blanking 3 least significant digits

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| RLC105-ND (PAXLID00) PAX LITE DC Current, 3 1/2-Digit, LED Meter   | \$109.20 |
| RLC107-ND (PAXLVD00) PAX LITE DC Voltmeter, 3 1/2-Digit, LED Meter | \$109.20 |

### PAX LITE 600 VAC Voltage Monitor



The Model PAXLHV is designed for AC voltage monitoring. The half-wave rectified input signal is calibrated to indicate the RMS value of a pure sinusoidal wave-form. The front bezel meets NEMA 4X/IP65 requirements when properly installed.

**Specifications:** • Power: 115/230VAC, switch selectable, 50/60 Hz • Input Range: 0 – 600VAC maximum • Resolution: 1VAC • Operating Temperature Range: 0°C – 60°C • Reading Rate: 400 msec., nominal • Response Time: 1 second nominal for a step change input

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| RLC111-ND (PAXLHV00) AC Voltage Monitor, 3-Digit, LED Meter | \$154.96 |
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### PAX LITE 5A AC Current Meter



PAX LITE 5 Amp AC Current Meter provides the capability of measuring large AC currents. The internal current shunt in the PAXLIT can measure up to 5 Amps AC current directly. Using an external current transformer, AC currents of up to 1,999 Amps can be measured and displayed. The PAXLIT can be scaled, using the scaling potentiometer to display between 200 and 1999 when measuring full scale current. Using the DIP switch selectable decimal points, the display can be customized for direct readout for practically any application

**Specifications:** • Display: 3 1/2-digit, 0.56" (14.2 mm) high, 7-segment LED; Decimal points inserted before 1st, 2nd, or 3rd least significant digits by DIP switch selection. • Power: 115/230VAC, switch selectable, 50/60 Hz • Range: 0 – 5 Amps AC @ 45 – 400 Hz • Accuracy:  $\pm$ (0.5% of reading + 5 digits) • Over-Range Indication: indicated by blanking 3 least significant digits • Maximum Shunt Current: 50 Amps for 1 second; 8 Amps continuous • Operating Temperature: 0°C – 60°C

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| RLC109-ND (PAXLIT00) PAX LITE Large AC Current, 3 1/2-Digit, LED Meter | \$154.96 |
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### PAX LITE Counter

The PAX Lite Counter, Model PAXLC, is a versatile totalizing counter that can be adapted to a wide variety of counting, measuring and positioning readout applications. The unit features a programmable scale factor, front panel and remote reset, store, inhibit and a count rate of 25 kHz, while offering an economical solution to any totalizing need. The PAXLC accepts digital inputs from a variety of sources including switch contacts, NPN-OC and TTL outputs, as well as most standard Red Lion sensors. The input can be scaled to display any desired unit of measure by simply using the programmable scale factor.

**Specifications:** • Overflow indicated by flashing dot to the right of digit. Decimal points are programmed by front panel keys. • AC Power: 115/230VAC, switch selectable, 50/60 Hz • DC Power: 10 – 16VDC @ 0.1 A maximum • Keypad: 3 programming keys, the (Down Arrow) key can also function as the front panel reset button • Count Input: DIP switch selectable, • Filter: Damping capacitor provided for switch contact bounce. Limits input frequency to 50 Hz and input pulse widths to 10 msec. minimum • Maximum Count Rate: 25 kHz maximum

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| RLC102-ND (PAXLC800) PAX LITE Counter, 8-Digit, LED Meter | \$157.04 |
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### PAX LITE Rate Meter



The PAX Lite Rate Meter, Model PAXLR, provides the versatility and flexibility needed to accommodate virtually any rate measuring application. The meter has the ability to scale for direct readout in terms of the units being measured. Whether a machine produces bottles, cloth, wire or beverage mix, operation is enhanced when the rate readout is expressed directly in bottles/minute, feet/minute or whatever units are needed in plant applications. The PAXLR can accommodate magnetic pickups, logic sensors and NPN open collector sensors. The meter is programmed through both the front panel buttons and DIP switches. Once the programming is complete, the front panel buttons can be disabled by a DIP switch setting.

**Specifications:** • Decimal points are programmed by front panel keys. • AC Power: 115/230VAC, switch selectable, 50/60 Hz • DC Power: 10 – 16VDC @ 0.1 A maximum • Keypad: 3 programming keys; Outputs, Magnetic Pickups and all standard Red Lion sensors • Input Frequency Range: • Maximum Frequency: 25 kHz • Minimum Frequency: 0.01 Hz • Accuracy:  $\pm$ 0.01% • Memory: Nonvolatile E2PROM retains all programmable parameters and display values. • Operating Temperature: 0°C – 60°C

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| RLC103-ND (PAXLR000) PAX LITE Rate, 6-Digit, LED Meter | \$148.72 |
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### PAX LITE Process Time Meter



The PAX Lite Process Time Meter, Model PAXLPT, displays a value representing the time between a beginning and end point of a process, such as a conveyor oven. The PAXLPT's display will update inversely in relation to the input signal frequency. As input frequency increases (representing speed), the PAXLPT time display will decrease indicating a reduction in the duration of process time. For example, the bake time through an oven will decrease the faster the conveyor runs. The display can be programmed for two operating modes. Operating in the 6 digit mode, the PAXLPT can readout in any whole value, such as seconds, minutes or hours. This mode also provides capability for decimal points. The 5 digit mode functions as a chronometer, which has a maximum display value of 999.59. This formats the display to allow the meter to readout in hours and minutes, minutes and seconds, etc.

**Specifications:** • AC Power: 115/230VAC, switch selectable, 50/60 Hz • DC Power: 10 – 16VDC @ 0.1 A maximum • Keypad: 3 programming keys • Input: DIP switch selectable; accepts pulses from a variety of sources including NPN-OC, PNP-OC, TTL Outputs, Magnetic Pickups and all standard Red Lion sensors. • Maximum input voltage:  $\pm$ 40 V peak, 30 Vrms • Input Frequency Range: • Maximum frequency: 25 kHz • Minimum frequency: 0.05 Hz • Accuracy:  $\pm$ 0.02% • Memory: Nonvolatile E2PROM retains all programmable parameters. • Operating Temperature: 0°C – 60°C

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| RLC104-ND (PAXLPT00) PAX LITE Process Time, 6-Digit, LED Meter | \$227.67 |
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### PAX LITE Current Loop Meter



With its high sensitivity and programmability, the PAX Lite Current Loop Meter can be set up for a wide variety of applications. In most plants the PAXLCL can be used for 90 to 95% of current loop meter needs for readout of pressure, flow, temperature, level and other variables. The meter has been specifically designed for harsh industrial environments.

**Specifications:** • Over-Range Indication: Indicated by blanking 3 least significant digits • Power: AC Power: 85 – 250VAC, 50/60 Hz, 6VA • Isolation: 2300 Vrms for 1 minute between input and supply (300V working voltage) • Input Sensitivity: (Numerical Readout Change/mA) 260 units/mA @ 4 – 20 mA input, 105 units/mA @ 10 – 50 mA input (maximum allowable input current, 170 mA) • Input Resistance: 4 – 20 mA – 29.2  $\Omega$ , 10 – 50 mA – 11.8  $\Omega$ . • Span: 32 coarse steps (binary progression with 5 DIP switches) Each step providing approximately 8.125 numerical units/mA/step sensitivity for 4 – 20 mA input and 3.25 units/mA/step for 10 to 50 mA input.

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| RLC112-ND (PAXLCL00) PAX LITE Current Loop, 3 1/2-Digit, LED Meter | \$154.96 |
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### PAX LITE RTD Meter

The PAX Lite RTD Meter accepts standard RTD inputs and precisely linearizes them into temperature readings. A full 4-digit display accommodates a wide range of temperature inputs. State-of-the-art digital circuitry virtually eliminates errors due to drift. The meter features a readout choice of either Fahrenheit or Celsius with 0.1 or 1 degree resolution. English Style display prompts and front panel buttons aid the operator through set-up and operation.

**Specifications:** • Power: 85 – 250VAC, 50/60 Hz • Controls: Three front panel push buttons for meter set-up; rear terminal input for disabling the front panel • Resolution: 0.1 or 1 degree • Range: Decimal Point Dependent 0.1° res: -199.9°C – 850.0°C (-199.9°F – 999.9°F); 1° res: -200°C – 850°C (-328°F – 1562°F) • Open/Shorted RTD Detection: Display flashes: "LOLO" or "OLUL" • Accuracy: 0.3°C, @ 23°C and 30 minutes warm-up • Reading Rate: 2.5 readings/second • Response Time: 2 seconds to settle for step input (increases with programmable digital filtering) • Low Frequency Noise Rejection: Normal Mode Rejection: 40 dB @ 50/60 Hz (may be improved by programmable digital filtering) • Common Mode Rejection: 120 dB, DC to 50/60 Hz. • Operating Temperature Range: 0°C – 50°C

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| RLC115-ND (PAXLRT00) PAX LITE RTD, 4-Digit, LED Meter | \$193.44 |
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More Product Available Online: [www.digikey.com](http://www.digikey.com)

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