

# Panel Meters

Award-winning solutions from the number one brand in industry



- The widest range of models, sizes and capabilities in the industry
- Display count, rate, time, voltage, current, process, strain gage and temperature
- Basic models to versatile multi-function and field-upgradeable models
- Superior technical support
- Powerful, complimentary Crimson<sup>®</sup> software
- Custom products available

**red lion**<sup>®</sup>  
INSIGHT ENABLED

Red Lion Panel Meters. The most solutions. The #1 brand.

Why do users prefer Red Lion meters?

Red Lion has more high quality solutions for your digital and analog panel meter requirements than any other supplier, with a wider range of models, sizes and capabilities—from our indicators to the versatile PAX process meters that let you add or change capabilities with plug-and-play, field-installable cards. Red Lion's free Crimson® software offers flexibility, powerful capabilities and intuitive ease. Combine the widest selection with our unmatched quality, speed of delivery and world-class technical support, and you'll understand why, when the world thinks of panel meters, it thinks of Red Lion.

- Widest range of products in the industry
- Field-installable option cards
- Easy-to-use Crimson software
- Superior quality
- Best delivery
- Unmatched technical support
- Leading Brand\*



\* For nine consecutive years the readers of Control Design Magazine have voted Red Lion the number one panel meter manufacturer in the industry.

Indication

Low cost, general purpose counters and timers with dedicated functionality and legendary Red Lion quality.



**CUB3 Series:** General purpose, miniature indicator with 6-digit, 0.2" LCD. Low 3 VDC operating power supplied via internal lithium battery. Reliable integrated circuitry, embedded in a single monolithic, silicon, microchip. 1" X 2" snap-in mounting.



**CUB7 Series:** Dedicated function 8-digit miniature displays with large 0.35" high backlit LCD. Low voltage and high voltage models. Decimal points and scaling model. Replaceable internal lithium battery. Remote reset; NEMA 4X/IP65.

Control and Indication

Workhorse panel meters offering versatility and functionality, with models available for measuring count, rate, time, voltage, current, temperature, process and strain gage.



**CUB5 Series:** Flexible functionality in a miniature 38 mm x 75 mm package. Field-installable option cards for setpoint and communications. 10 to 28 VDC powered with backlit 0.46" high LCD; NEMA 4X/IP65.



**PAX Lite:** 1/8 DIN meters for dedicated applications. Simple field setup, easy programming and dual setpoint control. 0.56" LED display; NEMA 4X/IP65.

Advanced Control and Indication

Includes all of the features of the Control and Indication products listed above, plus field-upgradeable option cards for advanced communications and output capabilities.



**PAX Series:** Versatile 1/8 DIN meter. Add up to 3 field-upgradeable option cards for dual and quad setpoint, retransmitted analog output, RS232, RS485, Modbus, Profibus and DeviceNet™ communications; dual count, dual rate, and dual process meters available; NEMA 4X/IP65.



**PAX2:** All the features of the PAX Series with a dual color, dual line display and increased update rates.

**LD Series:** 2.25" and 4" LED displays based on the popular CUB5 series. Single and dual preset models with RS232/RS485 communications; serial slave display version available; universal power supply; NEMA 4X/IP65.



**T48 Series:** 1/16 DIN temperature PID loop controller with reduced overshoot. Auto-tuning of PID control settings, dual display of temperature and setpoint; accepts up to 10 types of thermocouple or RTD inputs; multiple setpoints; RS485 communications; NEMA 4X/IP65.



**C48 Series:** 1/16 DIN dual line display for counting or timing. Multiple setpoints; RS485 communications; NEMA 4X/IP65.

**LPAX & EPAX Series:** 1.5" (LPAX) and 4" (EPAX) displays based on the popular PAX Series with all of the same features, including field-upgradeable option cards. NEMA 4X/IP65.



See our Online Panel Meter Selector at: [www.redlion.net](http://www.redlion.net)



**Plug-in flexibility and savings.**  
**Extendable solutions change everything.**



**Crimson® software:**  
**Easy-to-use, easier to value.**

**Don't underestimate the value of free.**

Crimson is the only software in the industry that allows you to program panel meters, temperature controllers, HMIs, gateways, the Data Station Plus, Modular Controllers and large displays—all from the same platform. And it offers portability to let you save your configuration files to program other meters and Red Lion devices. This open, intuitive and menu-driven universal solution guides you quickly through set-up and delivers performance and capabilities that not only rivals costly competitor software, but exceeds them. No solution is faster, easier or more flexible. At any price.

**The last meter you will ever buy.**

Red Lion's CUB5 and PAX Series meters both offer the capability to add and change option cards as your application and communications requirements change. Red Lion field-upgradeable solutions are the perfect alternative to competitive meters that force you to order a new meter every time conditions change. With Red Lion meters, simply order the option card you need for easy, plug-and-play installation. With our wide range of output cards, including communications, setpoints and retransmitted analog, Red Lion can handle your challenging applications and changing requirements.

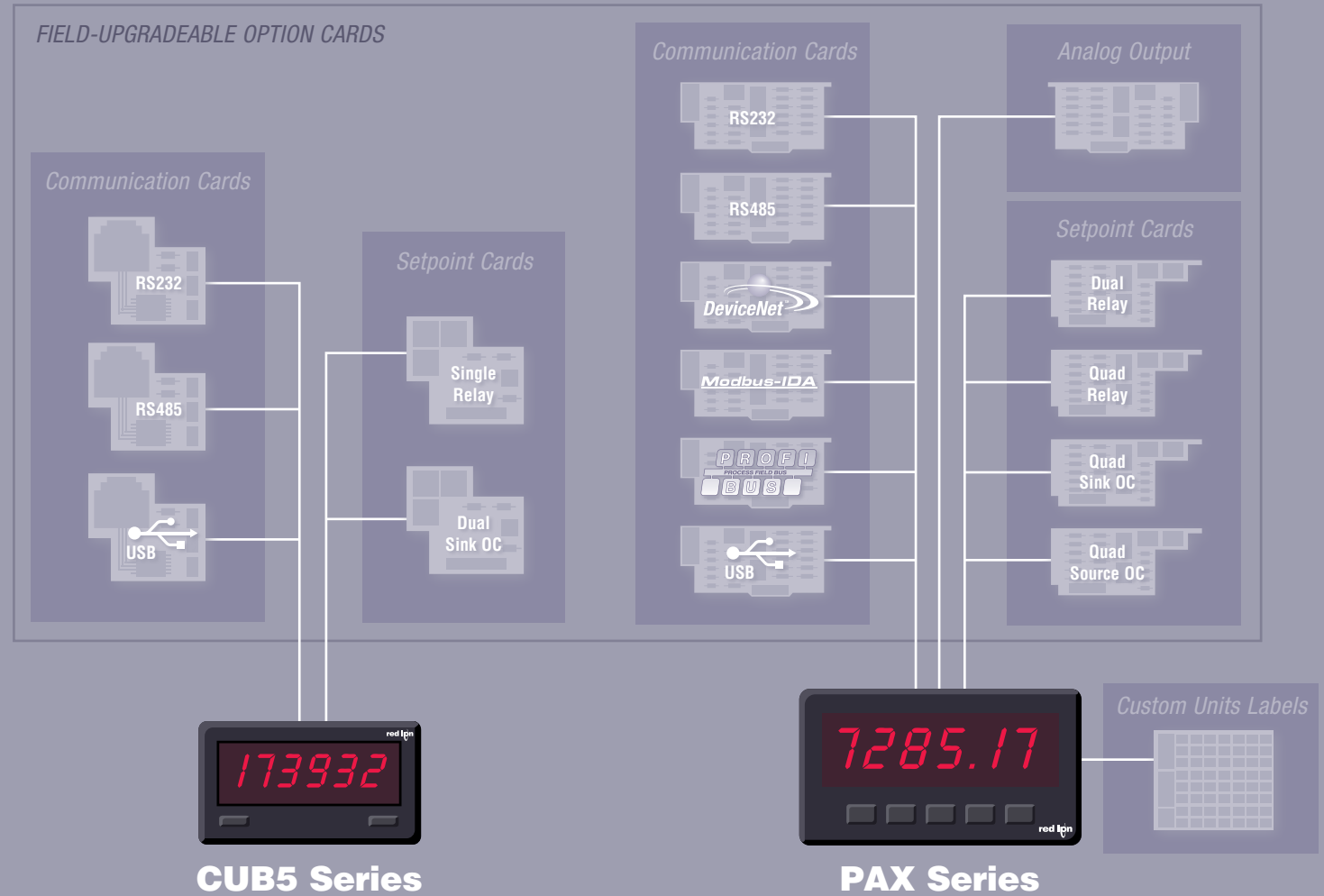


Change functions, add capabilities with plug-and-play, field-installable cards.



USB cards let you quickly connect to computers and communicate directly to the meters. No more messy converters.

**Plug-In Option Cards: Innovation and flexibility.**



**CUB5 Series**

**PAX Series**

**Integrate your process.**

Extend the reach of Red Lion panel meters by connecting them to a G3 Series HMI, Data Station Plus or a Modular Controller. Share panel meter data with other devices by using one of the 200+ protocols and log panel meter data to an IT-ready file. Use pass-through programming to configure the panel meter remotely, then modify panel meter parameters if configuration changes are required.

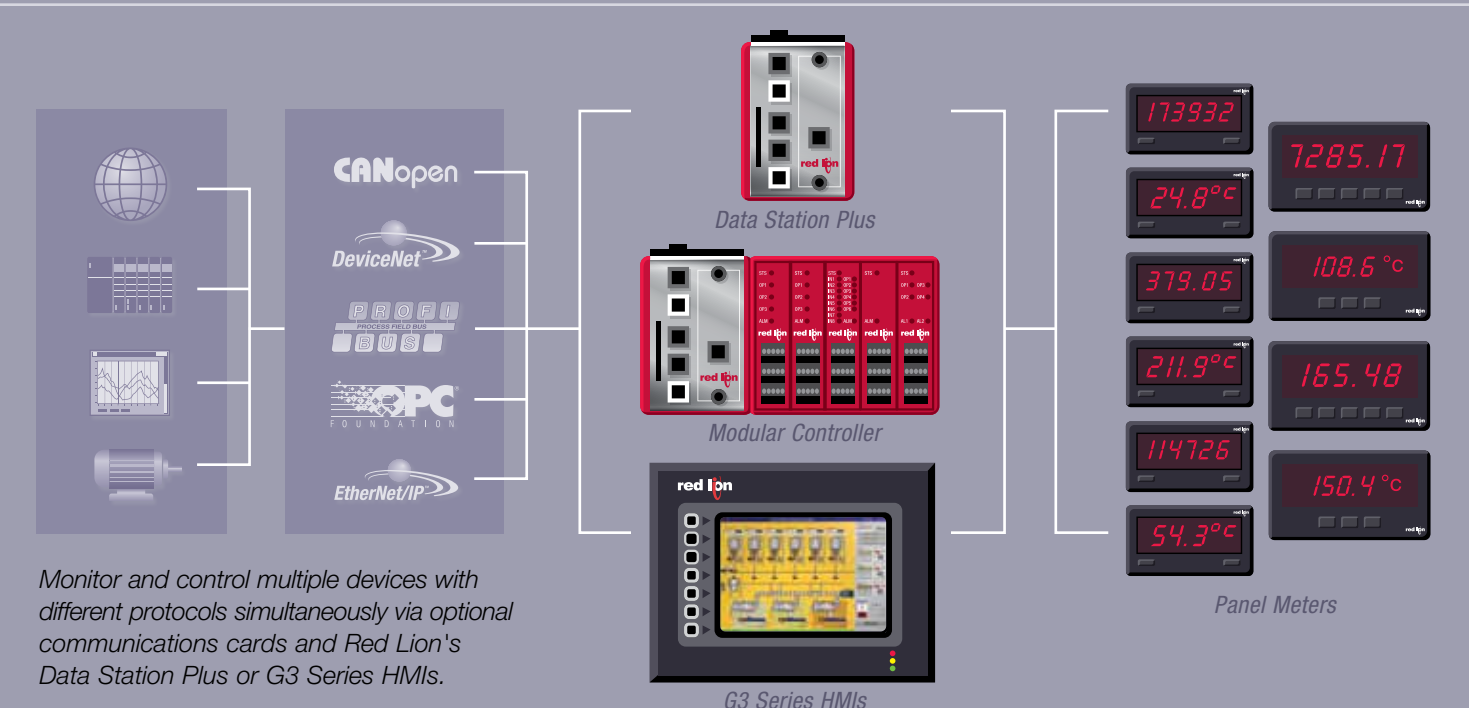


The Data Station Plus functions as both a data management platform and PFM host.



Red Lion G3 models are available in 3" mono, plus 6", 8", 10" and 15" color touchscreens.

When connected to a G3 HMI, Data Station Plus or Modular Controller, a panel meter can send alarm or event information via emails or SMS. And you can view data remotely using a web browser for real-time monitoring and control.



Monitor and control multiple devices with different protocols simultaneously via optional communications cards and Red Lion's Data Station Plus or G3 Series HMIs.

Panel Meters

G3 Series HMIs

# Panel Meter Specifications

## Indication



**CUB3**

Miniature 1/32 DIN

**CUB7**

Miniature 1/32 DIN

## Control & Indication



**CUB5**

Miniature Intelligent Meter Series

**PAX Lite**

1/8 DIN Meter Series

**T48/P48**

Miniature 1/16 DIN

**C48C/C48T**

Miniature 1/16 DIN

**LD Series**

Large Displays

## Advanced Control & Indication



**PAX**

1/8 DIN Intelligent Meter Series

**PAX2 Dual Line**

1/8 DIN Intelligent Meter Series

**LPAX/EPAX**

Large Displays

	CUB3 Miniature 1/32 DIN	CUB7 Miniature 1/32 DIN	CUB5 Miniature Intelligent Meter Series	PAX Lite 1/8 DIN Meter Series	T48/P48 Miniature 1/16 DIN	C48C/C48T Miniature 1/16 DIN	LD Series Large Displays	PAX 1/8 DIN Intelligent Meter Series	PAX2 Dual Line 1/8 DIN Intelligent Meter Series	LPAX/EPAX Large Displays
<b>Display Type</b>	6-Digit LCD, 0.2" (5.1 mm)	8-Digit, Reflective or Red and Green Backlight LCD, 0.35" (9 mm)	5- or 8-Digit, Reflective or Red/Green Backlight LCD, 0.46" (12 mm)	5- to 8-Digit Red LED Display 0.56" (14 mm)	4-Digit, Dual Line Red/Green LED Display 0.4" (10.2 mm)/0.3" (7.6 mm)	6-Digit, Reflective or Red/Green Backlight LCD, 0.3" (7.6 mm)/0.2" (5 mm)	5- and 6-Digit, 2.25" (57 mm) or 4" (101 mm) Red LED Display	5- or 6-Digit Red or Green LED Display 0.56" (14 mm)	6-Digit, 0.7" (17.8mm) Top Line 9-Digit, 0.34" (8.6 mm) Bottom Red/Green LCD Display	5- and 6-Digit, 1.5" (38 mm) or 4" (101 mm) Red LED Display
<b>Dimension (W x H)</b>	2" x 1" (51 x 25 mm)	2" x 1.1" (51 x 28 mm)	2.95" x 1.5" (75 x 38 mm)	3.80" x 1.95" (97 x 50 mm)	1.95" x 1.95" (50 x 50 mm)	1.95" x 1.95" (50 x 50 mm)	12" x 4" (304 x 101 mm) or 16" x 4" (406 x 101 mm) or 20" x 7.87" (508 x 200 mm) or 26" x 7.87" (660 x 200 mm)	3.80" x 1.95" (97 x 50 mm)	3.80" x 1.95" (97 x 50 mm)	10" x 4.75" (254 x 121 mm) or 24.77" x 7.2" (629 x 183 mm)
<b>Input Capability</b>	Count and Time	Count and Time	Count, Rate, Time, Current, Voltage, Process and Temperature	Count, Rate, Time, Current, Voltage, Process, Strain Gage & Temperature	Temperature or Process	Count or Time	Count, Rate, Time, Current, Voltage, Process and Serial Slave	Count, Rate, Time, Current, Voltage, Process, Strain Gage and Temperature	Current, Voltage, Process, and Temperature	Count, Rate, Time, Current, Voltage, Process, Strain Gage and Temperature
<b>Setpoint Capability</b>	N/A	N/A	Single or Dual Outputs	Dual Outputs (Some Models)	Single, Dual & Triple Outputs	Single, Dual & Triple Outputs	Single or Dual Outputs	Dual or Quad Outputs	Dual or Quad Outputs	Dual or Quad Outputs
<b>Retransmitted Analog</b>	N/A	N/A	N/A	N/A	Yes	N/A	N/A	Yes	Yes	Yes
<b>Power Source</b>	Lithium Battery, 3 VDC	Lithium Battery, 9 to 28 VDC for Backlighting	9 to 28 VDC	85 to 250 VAC	85 to 250 VAC or 18 to 36 VDC/24 VAC	85 to 250 VAC or 18 to 36 VDC/24 VAC	Universal Power, 50 to 250 VAC and 22 to 250 VDC	85 to 250 VAC or 11 to 36 VDC	85 to 250 VAC or 11 to 36 VDC	85 to 250 VAC or 11 to 36 VDC
<b>Sensor Excitation</b>	N/A	N/A	N/A	Yes	N/A	Yes	Yes	Yes	Yes	Yes
<b>Other Features</b>	Front Panel Reset or Remote Reset	Front Panel Reset or Remote Reset	2 Option Card Slots. Front Panel Reset or Remote Reset	Custom Units Overlay for Analog Meters	N/A	N/A	N/A	Custom Units Overlay for Analog Meters, 3 Option Card Slots	3 Option Card Slots	USB Programming Card, 3 Option Card Slots
<b>Communications Capability</b>	N/A	N/A	Yes	N/A	Yes	Yes	Yes	Yes	Yes	Yes
<b>NEMA 4X/IP65</b>	N/A	Front Panel	Front Panel	Front Panel	Front Panel	Front Panel	Sealed Case	Front Panel	Front Panel	Front Panel



DIGITAL Applications	CUB5	PAX Lite	PAX	Large Displays
<b>Counting/Totalizing</b>	CUB5R000, CUB5B000	PAXLC600, PAXLC800	PAXC0000	LD Series, LPAX/EPAX
<b>Preset Count</b>	CUB5R000, CUB5B000	PAXLCR00	PAXC0000, PAXI0000	LD Series, LPAX/EPAX
<b>Batch Count</b>	CUB5R000, CUB5B000	N/A	PAXC0000, PAXI0000	LD Series, LPAX/EPAX
<b>Rate Indication</b>	CUB5R000, CUB5B000	PAXLR000	PAXR0000	LD Series, LPAX/EPAX
<b>Rate Control</b>	CUB5R000, CUB5B000	PAXLCR00	PAXR0000, PAXI0000	LD Series, LPAX/EPAX
<b>Elapsed Timing</b>	CUB5TR00, CUB5TB00	N/A	PAXTM000	LD Series, LPAX/EPAX
<b>Time Control</b>	CUB5TR00, CUB5TB00	N/A	PAXTM000	LD Series, LPAX/EPAX
<b>Real-Time Clock</b>	N/A	N/A	PAXCK000	LPAX/EPAX

ANALOG Applications	CUB5	PAX Lite	PAX	Large Displays
<b>AC Current</b>	N/A	PAXLIA00, PAXLIT00	PAXH0000	LPAX/EPAX
<b>AC Voltage</b>	N/A	PAXLVA00, PAXLHV00	PAXH0000	LPAX/EPAX
<b>DC Current</b>	CUB5IR00, CUB5IB00	PAXLID00, PAXLA000	PAXD0000	LD Series, LPAX/EPAX
<b>DC Voltage</b>	CUB5VR00, CUB5VB00	PAXLVD00, PAXLA000	PAXD0000	LD Series, LPAX/EPAX
<b>Process Signals</b>	CUB5PR00, CUB5PB00	PAXLCL00, PAXLA000	PAXP0000	LD Series, LPAX/EPAX
<b>Temperature, RTD</b>	CUB5RTR0, CUB5RTB0	PAXLRT00, PAXLT000	PAXT0000	LPAX/EPAX
<b>Temperature, Thermocouple</b>	CUB5TCR0, CUB5TCB0	PAXLTC00, PAXLT000	PAXT0000	LPAX/EPAX
<b>Strain Gage/Load Cells</b>	N/A	PAXLSG00	PAXS0000	LPAX/EPAX

# Red Lion: Integrated solutions for the plant floor.



## G3 Series HMI\*

### Graphic Operator Interface Terminals

- 3 serial ports and an Ethernet port
- Web-based HMI for remote access
- Protocol conversion of over 170 protocols
- Data logging to CompactFlash® or FTP
- Email alarms or logged files
- Text alarms to mobile phones
- Functions as an HMI and PFM host at the same time



## Data Station Plus Series\*

### Data Management Platform

- 3 serial ports and an Ethernet port
- Web-based HMI for remote access
- Protocol conversion of over 170 protocols
- Data logging to CompactFlash® or FTP
- Email alarms or logged files
- Text alarms to mobile phones
- Functions as a data management platform and PFM host at the same time



## Modular Controller Series\*

### Multi-Loop and Data Acquisition Platform

- 3 serial ports and an Ethernet port
- Web-based HMI for remote access
- Protocol conversion of over 170 protocols
- Data logging to CompactFlash® or FTP
- Email alarms or logged files
- Text alarms to mobile phones
- PID and I/O modules for control or data acquisition
- Functions as a data acquisition platform and PFM host at the same time

\*For more information on the G3, DSP and Modular Controller Series, please refer to the respective product brochure.

## Add our sensors and enclosures for a complete system



Encoders



Plastic Enclosures



Pressure Transducers



Current Transducers



Magnetic Pickups



Metal Enclosures



Proximity Sensors



Panels and Adapters



Temperature Sensors



Length Sensors



### Red Lion Controls

**USA**  
20 Willow Springs Circle  
York, PA 17406  
Tel (717) 767 6511  
Fax (717) 764 0839

**Europe**  
Printerweg 10  
NL - 3821 AD Amersfoort  
Tel +31 (0) 334 723 225  
Fax +31 (0) 334 893 793

**India**  
54, Vishvas Tenement  
GST Road, New Ranip  
Ahmedabad-382480 Gujarat  
Tel +91 987 954 0503  
Fax +91 79 275 31 350

**China**  
Unit 101, XinAN Plaza  
Building 13, No.99 Tianziniu Rd.  
ShangHai, P.R. China 200223  
Tel: +86 21 6113 3888  
Fax: +86 21 6113 3683

[www.redlion.net](http://www.redlion.net)

**red lion**<sup>®</sup>  
INSIGHT ENABLED