Visualize Product Guide

HMI | Panel Meters | Large LED Displays

RL RED LION®

Red Lion Controls offers a wide variety of automation products that support a full spectrum of industrial applications.

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HMI Operator Panels

Powerful multi-protocol support enables communication between 300+ industrial protocols. Configured with the award-winning, easy-to-use Crimson® software, which is included at no additional cost.

- HMIs allow you to interact with your data
- Convert between 300+ industrial protocols
- Collect, store and display data
- Easily integrate into multi-vendor environments

GRAPHITE® RUGGED ADVANCED HMIS

- Rugged sunlight visible outdoor rated models
- Support for 300+ industrial protocols, up to 20 simultaneous conversions
- Wide -20° to 60°C operating temperature range
- Unparalleled expansion capabilities using plug-in modules
- Built-in data logging (SD card), web server and FTP for remote access
- Send email and/or SMS based on alarm conditions
- All models UL Class 1, Division 2 Listed for hazardous locations

Model Number	Indoor/ Outdoor	Display Size	Display	Serial Ports	Ethernet Ports	USB Host	Expansion	Card Support
G07C0000	Indoor	7"	800 x 480	3 iso.	1	2	5 Module Slots	SD Card
G07S0000	Outdoor	7"	800 x 480	3 iso.	1	2	5 Module Slots	SD Card
G09C0000	Indoor	9"	800 x 480	3 iso.	1	2	6 Module Slots	SD Card
G09C1000	Indoor	9"	800 x 480	3 iso.	2	2	6 Module Slots	SD Card
G10C0000	Indoor	10"	640 x 480	3 iso.	1	2	7 Module Slots	SD Card
G10C1000	Indoor	10"	640 x 480	3 iso.	2	2	7 Module Slots	SD Card
G10R0000	Indoor	10"	800 x 600	3 iso.	1	2	7 Module Slots	SD Card
G10R1000	Indoor	10"	800 x 600	3 iso.	2	2	7 Module Slots	SD Card
G10S0000	Outdoor	10"	640 x 480	3 iso.	1	2	7 Module Slots	SD Card
G10S1000	Outdoor	10"	640 x 480	3 iso.	2	2	7 Module Slots	SD Card
G12C0000	Indoor	12"	1280 x 800	3 iso.	1	2	8 Module Slots	SD Card
G12C1100	Indoor	12"	1280 x 800	4 iso.	2	2	8 Module Slots	SD Card
G12S1100	Outdoor	12"	1280 x 800	4 iso.	2	2	8 Module Slots	SD Card
G15C0000	Indoor	15"	1024 x 768	3 iso.	1	2	8 Module Slots	SD Card
G15C1100	Indoor	15"	1024 x 768	4 iso.	2	2	8 Module Slots	SD Card

CR1000 HMIS

- Support for 300+ industrial protocols
- Several connectivity options, including serial and Ethernet
- NEMA 4X, IP66 Front Panel Rating

Model Number	Indoor/ Outdoor	Display Size	Display	Serial Ports	Ethernet Ports	USB Host	Expansion	Card Support
CR1000-04000-00210	Indoor	4.3"	480 x 272	2	1	0	No	Yes
CR1000-07000-00210	Indoor	7"	800 x 480	2	1	0	No	Yes
CR1000-10000-00210	Indoor	10.4"	800 x 600	2	1	0	No	Yes

CR3000 HMIS

- Support for 300+ industrial protocols
- Built-in data logging (SD card), web server and FTP for remote access
- Send email and/or SMS based on alarm conditions
- Multiple connectivity options including serial, Ethernet and USB
- NEMA 4X, IP66 Front Panel Rating

Model Number	Indoor/ Outdoor	Display Size	Display	Serial Ports	Ethernet Ports	USB Host	Expansion	Card Support
CR3000-04000-00310	Indoor	4.3"	480 x 272	3	1	1	Yes	Yes
CR3000-07000-00420	Indoor	7"	800 x 480	4	2	2	Yes	Yes
CR3000-10000-00420	Indoor	10.4"	800 x 600	4	2	2	Yes	Yes
CR3000-15000-00420	Indoor	15"	1024 x 768	4	2	2	Yes	Yes

Features	GRAPHITE HMIs	CR1000/CR3000 HMIs
Serial Ports	4*	4*
Ethernet	2*	2*
USB Host	2	2*
Crimson Software	Yes	Yes
C-Type User Programming	Yes	Yes
Protocol Converter	Yes	Yes
Simultaneous Conversions	20	15*
Web Server, FTP, Data Logging	Yes	Yes*
Expansion Card Slots	8*	1*
Temperature Range	-20° to 60°C	-10° to 50°C

Model-dependant

Panel Meters

Red Lion offers the widest and most comprehensive line of panel meters in the industry. Our meters are available in various sizes and capabilities including count, rate, time, voltage, current, process, strain gage and temperature inputs. With millions of units sold, our panel meters are field proven, time tested and have earned the distinction of being consistently voted the industry's #1 brand by the readers of Control Design for 23 years and counting.

○ Decades of proven reliability

○ Wide model range supports varying requirements

○ Field-upgradeable I/O and communication cards

Feature	PM-50 Series	PAX Series	PAX Lite Series	CUB5 Series	CUB4 Series	CUB7 Series
Count	●	●	●	●	●	●
Count/Rate	●	●	●	●		
Rate	●	●	●	●		
Time		●		●		●
Current	●	●	●	●	●	
Process	●	●	●	●	●	
Voltage	●	●	●	●		
Strain Gauge		●	●			
Temperature	●	●	●	●	●	

PM-50 GRAPHICAL PANEL METERS

○ Easy to read graphical displays with full-color touchscreen

○ Easy to program: wizard, app & web browser

○ Easy to connect: Wi-Fi, Modbus, Ethernet & RS232

○ Easy to integrate: replaces existing 1/16 and 1/8 DIN devices

○ Universal input and output capabilities

Model Number	Function	Size	Display	Power	Retrans. Analog	Comm. Capability
PM500A0301600F00	Universal DC Analog Meter	1/16 DIN	3.5"	DC/AC*	Yes	Yes
PM500D0301600F00	Dual Counter or Counter/Rate	1/16 DIN	4.3"	DC/AC*	Yes	Yes
PM500A0400800F00	Universal DC Analog Meter	1/8 DIN	3.5"	DC/AC*	Yes	Yes
PM500D0400800F00	Dual Counter or Counter/Rate	1/8 DIN	4.3"	DC/AC*	Yes	Yes

AC requires an option module

PAX 1/8 DIN ANALOG & DIGITAL PANEL METERS

- ◦ Digital or analog input models
- ◦ Up to four setpoint alarms
- ◦ Optional communication cards include RS-232, RS-485, Modbus®, DeviceNet® and PROFIBUS-DP

DIGITAL INPUT

Model Number	Function	Display Length	Display Height	LED	Power	Retrans. Analog	Comm. Capability
PAXI0020	Dual Counter or Count/Rate	6 Digit	0.56" (14 mm)	Red	AC	Yes	Yes
PAXI0030	Dual Counter or Count/Rate	6 Digit	0.56" (14 mm)	Red	DC	Yes	Yes
PAXC0020	Counter	6 Digit	0.56" (14 mm)	Red	AC	-	-
PAXC0030	Counter	6 Digit	0.56" (14 mm)	Red	DC	-	-
PAXR0020	Rate Meter	6 Digit	0.56" (14 mm)	Red	AC	-	-
PAXR0030	Rate Meter	6 Digit	0.56" (14 mm)	Red	DC	-	-
PAXCK000	Real-Time Clock	6 Digit	0.56" (14 mm)	Red	AC	-	Yes
PAXCK010	Real-Time Clock	6 Digit	0.56" (14 mm)	Red	DC	-	Yes
PAXTM000	Timer	6 Digit	0.56" (14 mm)	Red	AC	-	Yes
PAXTM010	Timer	6 Digit	0.56" (14 mm)	Red	DC	-	Yes

ANALOG INPUT

Model Number	Function	Display Length	Display Height	LED	Power	Retrans. Analog	Comm. Capability
PAXD0000	Universal DC Analog Meter	6 Digit	0.56" (14 mm)	Red	AC	Yes	Yes
PAXD0010	Universal DC Analog Meter	6 Digit	0.56" (14 mm)	Red	DC	Yes	Yes
PAXDP000	Dual Process Meter	6 Digit	0.56" (14 mm)	Red	AC	Yes	Yes
PAXDP010	Dual Process Meter	6 Digit	0.56" (14 mm)	Red	DC	Yes	Yes
PAXP0000	Process Meter	4 1/2 Digit	0.56" (14 mm)	Red	AC	Yes	Yes
PAXP0010	Process Meter	4 1/2 Digit	0.56" (14 mm)	Red	DC	Yes	Yes
PAXS0000	Strain Gage Meter	4 1/2 Digit	0.56" (14 mm)	Red	AC	Yes	Yes
PAXS0010	Strain Gage Meter	4 1/2 Digit	0.56" (14 mm)	Red	DC	Yes	Yes
PAXT0000	Universal Temperature Meter	4 1/2 Digit	0.56" (14 mm)	Red	AC	Yes	Yes
PAXT0010	Universal Temperature Meter	4 1/2 Digit	0.56" (14 mm)	Red	DC	Yes	Yes

PAX LITE 1/8 DIN DISPLAY METERS

- Basic function meters
- AC or DC power input models
- Red LED display with 0.56" (14 mm) digits

Model Number	Function	Display Length	Setpoints	Power
PAXLA0U0	Universal DC Analog Meter	5 Digit	Yes	AC/DC
PAXLC600	Counter	6 Digit	-	AC
PAXLCL00	Current Loop Meter	3 1/2 Digit	-	AC
PAXLCRU0	Dual Counter and Rate Meter	6 Digit	Yes	AC/DC
PAXLHV00	AC Voltage Meter	3 Digit	-	AC
PAXLIA00	AC Current Meter	3 1/2 Digit	-	AC
PAXLID00	DC Current Meter	3 1/2 Digit	-	AC
PAXLIT00	5 Amp Current Meter	3 1/2 Digit	-	AC
PAXLPT00	Process Time Indicator	6 Digit	-	AC
PAXLPV00	Process Volt Meter	3 1/2 Digit	-	AC
PAXLR000	Rate Meter	6 Digit	-	AC
PAXLSG00	Strain Gage Meter	3 1/2 Digit	-	AC
PAXLT0U0	Universal Temperature Meter	3 1/2 Digit	Yes	AC/DC
PAXLVA00	AC Voltage Meter	3 1/2 Digit	-	AC
PAXLVD00	DC Volt Meter	3 1/2 Digit	-	AC

CUB®5 ANALOG & DIGITAL PANEL METERS

- Single or dual setpoint control, field-installable relay or SSR and communication cards
- 9 to 28 VDC power input
- Width 2.68" (68 mm) x height 1.3" (33 mm) x depth 1.29" (44 mm)

Model Number	Function	Display Length	Display Height	Display Color	Color Change At Setpoint
CUB5VB00	DC Volt Meter	5 Digit	0.48" (12 mm)	Red/Green Backlight	Yes
CUB5VR00	DC Volt Meter	5 Digit	0.48" (12 mm)	Reflective	-
CUB5TB00	Timer	7 Digit	0.46" (11 mm)	Red/Green Backlight	Yes
CUB5TR00	Timer	7 Digit	0.46" (11 mm)	Reflective	-
CUB5B000	Dual Counter or Count / Rate	8 Digit	0.46" (11 mm)	Red/Green Backlight	Yes
CUB5R000	Dual Counter or Count / Rate	8 Digit	0.46" (11 mm)	Reflective	-
CUB5PB00	Process Meter	5 Digit	0.48" (12 mm)	Red/Green Backlight	Yes
CUB5PR00	Process Meter	5 Digit	0.48" (12 mm)	Reflective	-
CUB5IB00	DC Current Meter	5 Digit	0.48" (12 mm)	Red/Green Backlight	Yes
CUB5IR00	DC Current Meter	5 Digit	0.48" (12 mm)	Reflective	-
CUB5RTB0	RTD Meter	5 Digit	0.48" (12 mm)	Red/Green Backlight	Yes
CUB5RTR0	RTD Meter	5 Digit	0.48" (12 mm)	Reflective	-
CUB5TCB0	Thermocouple Meter	5 Digit	0.48" (12 mm)	Red/Green Backlight	Yes
CUB5TCR0	Thermocouple Meter	5 Digit	0.48" (12 mm)	Reflective	-

CUB4 ANALOG & DIGITAL PANEL METERS

- Basic function display meters
- Red/green backlight or reflective LCD display
- 9 to 28 VDC power input
- Width 2.68" (68 mm) x height 1.3" (33 mm) x depth 1.29" (44 mm)

Model Number	Function	Display Length	Display Height	Display Color
CUB4L000	Counter	6 Digit	0.48" (12 mm)	Reflective
CUB4L020	Counter	6 Digit	0.48" (12 mm)	Red Backlight
CUB4L800	Counter	8 Digit	0.46" (12 mm)	Reflective
CUB4L820	Counter	8 Digit	0.46" (12 mm)	Red Backlight
CUB4V000	DC Volt Meter	3 1/2 Digit	0.6" (15 mm)	Reflective
CUB4V020	DC Volt Meter	3 1/2 Digit	0.6" (15 mm)	Red Backlight
CUB4CL20	Current Loop Meter	3 1/2 Digit	0.6" (15 mm)	Red Backlight, Negative Image
CUB4CL40	Current Loop Meter	3 1/2 Digit	0.6" (15 mm)	Red Backlight, Positive Image
CUB4LP00	Loop Powered Process Meter	3 1/2 Digit	0.6" (15 mm)	Reflective
CUB4LP40	Loop Powered Process Meter	3 1/2 Digit	0.6" (15 mm)	Red Backlight

CUB7 1/32 DIN COUNTERS & TIMERS

- Eight-digit display with 0.35" (9 mm) numbers
- Yellow/green or red backlight LCD display
- Provides contact, logic, open collector or high-voltage input

Model Number	Function	Display Color	Inputs	Timing
CUB7CCR0	Counter	Backlight Red	28 VDC max	-
CUB7CCS0	Counter	Reflective	28 VDC max	-
CUB7CVR0	Counter	Backlight Red	50 to 250 VAC/VDC	-
CUB7CVS0	Counter	Reflective	50 to 250 VAC/VDC	-
CUB7TCR0	Timer	Backlight Red	28 VDC max	Time when input is low
CUB7TCR1	Timer	Backlight Red	28 VDC max	Time when input is high
CUB7TCS0	Timer	Reflective	28 VDC max	Time when input is low
CUB7TCS1	Timer	Reflective	28 VDC max	Time when input is high
CUB7TVR0	Timer	Backlight Red	50 to 250 VAC/VDC	Time when input is low
CUB7TVS0	Timer	Reflective	50 to 250 VAC/VDC	Time when input is low

Large LED Displays

Red Lion offers a wide range of large LED displays with multiple inputs and optional output cards to meet a variety of visual display needs. Our large industrial displays are available with up to 4 inch (101 mm) tall characters and can display up to six digits to provide reliable visual display performance in rugged environments.

◦ Available as complete solution or expandable with modules
◦ Easily expand functionality with option cards
◦ Universal power inputs (model specific)
◦ Support for serial communication

LD2 2.25" LARGE DISPLAYS

◦ 2.25-inch (57 mm) LED digits with adjustable intensity
◦ Optional RS-232 or RS-485 communication ports
◦ Universal AC/DC power input

Model Number	Function	Digits	Batch / Cycle	Setpoints	Comms
LD200400	Counter	4	-	-	-
LD200600	Counter	6	-	-	-
LD2006P0	Dual Counter / Rate	6	Yes	Yes	Yes
LD2A05P0	DC Volt / DC Current / Process	5	-	Yes	Yes
LD2SG5P0*	Strain Gage	5	-	Yes	Yes
LD2SS6P0	Serial Slave	6	-	Yes	Yes
LD2T06P0	Timer	6	Yes	Yes	Yes

Not UL Listed.

LD4 4" LARGE DISPLAYS

- Four-inch (101 mm) LED digits with adjustable intensity
- Optional RS-232 or RS-485 communication ports
- Universal AC/DC power input

Model Number	Function	Digits	Batch / Cycle	Setpoints	Comms
LD400400	Counter	4	-	-	-
LD400600	Counter	6	-	-	-
LD4006P0	Dual Counter / Rate	6	Yes	Yes	Yes
LD4A05P0	DC Volt / DC Current / Process	5	-	Yes	Yes
LD4SG5P0*	Strain Gage	5	-	Yes	Yes
LD4SS6P0	Serial Slave	6	-	Yes	Yes
LD4T06P0	Timer	6	Yes	Yes	Yes

Not UL Listed.

Certifications & Approvals

UL LISTED

UL has tested representative samples of the product and determined that it meets UL requirements. These requirements are based primarily on ULs published and nationally recognized Standards for Safety. (Underwriters Laboratories, www.ul.com, 2015)

ABS

The Product Design Assessment is valid for products intended for use on ABS classed vessels, MODUs or facilities which are in existence or under contract for construction on the date of the ABS Rules used to evaluate the product. (ABS, ww2.eagle.org, 2015)

IECEX

The objective of the IECEx system is to facilitate international trade in equipment and services for use in explosive atmospheres, while maintaining the required level of safety. (IEC IECEx, www.iecex.com, 2015)

ATEX

The equipment and protective systems intended for use in potentially explosive atmospheres (ATEX) Directive 94/9/EC provides the technical requirements to be applied and the relevant conformity assessment procedures before placing this equipment on the European market. (European Commission, www.ec.europa.eu, 2014)

UL RECOGNIZED COMPONENT

The evaluation of components or materials intended for use in a complete product or system. (Underwriters Laboratories, www.ul.com, 2015)

PESO

PESO Certification in India is mandatory for products used in the oil, gas, and mining industries, as per the Explosives and Petroleum Acts and related regulations. It covers items like explosion-proof equipment, pressure vessels, and products for corrosive environments, ensuring safety and compliance.

CE

The CE marking indicates a product's compliance with EU legislation and so enables the free movement of products within the European market. (European Commission, www.ec.europa.eu, 2014)

CCC

The China Compulsory Certificate mark, commonly known as a CCC Mark, is a compulsory safety mark for many products imported, sold or used in the Chinese market.

About Red Lion

Red Lion is focused on being THE Industrial Data Company ™. We empower industrial organizations around the world to unlock the value of data by developing and manufacturing innovative products and solutions to access, connect and visualize their information.
Red Lion's global manufacturing and support facilities serve customers in factory automation, alternative energy, oil and gas, power and utilities, transportation, water and wastewater industry segments. We provide scalable solutions for cloud connectivity, edge intelligence and asset management, industrial Ethernet switches and industry leading panel meters and operator panels, to make it easy for companies to gain real-time data visibility that drives productivity. For more information, please visit **www.redlion.net**

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