




EXCELLENCE. REDEFINED.

Industrial Automation **PRODUCT GUIDE**

HMI | Panel Meters | Remote Access | PID Controllers
Data Acquisition | RTUs & I/Os | Signal Conditioners

Wesco | Carlton-Bates



Red Lion Controls offers a wide variety of automation products that support a full spectrum of industrial applications. From factory automation to process control, our products address a wide range of industrial requirements.

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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.

- ▲ Convert between 300+ industrial protocols
- ▲ Collect, store and display data
- ▲ Easily integrate into multi-vendor environments
- ▲ Configure using Crimson software



GRAPHITE® RUGGED ADVANCED HMIS

- ▲ Unparalleled expansion capabilities using plug-in modules
- ▲ Wide -20° to 60°C operating temperature range
- ▲ Rugged sunlight visible outdoor rated models
- ▲ Support for 300+ industrial protocols, up to 20 simultaneous conversions
- ▲ 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

GRAPHITE EXPANSION RACK

- ▲ Unparalleled expansion capabilities using plug-in modules
- ▲ USB cable connects Expansion Rack to Graphite platform
- ▲ Easy back-of-cabinet mounting and support
- ▲ All models UL Class 1, Division 2 Listed for hazardous locations



Model Number	USB Host	Expansion	Operating Temp.
GEXRACK1	1	3 Module Slots	-40° to 75°C*
GEXRACK2	-	3 Module Slots	-40° to 75°C*

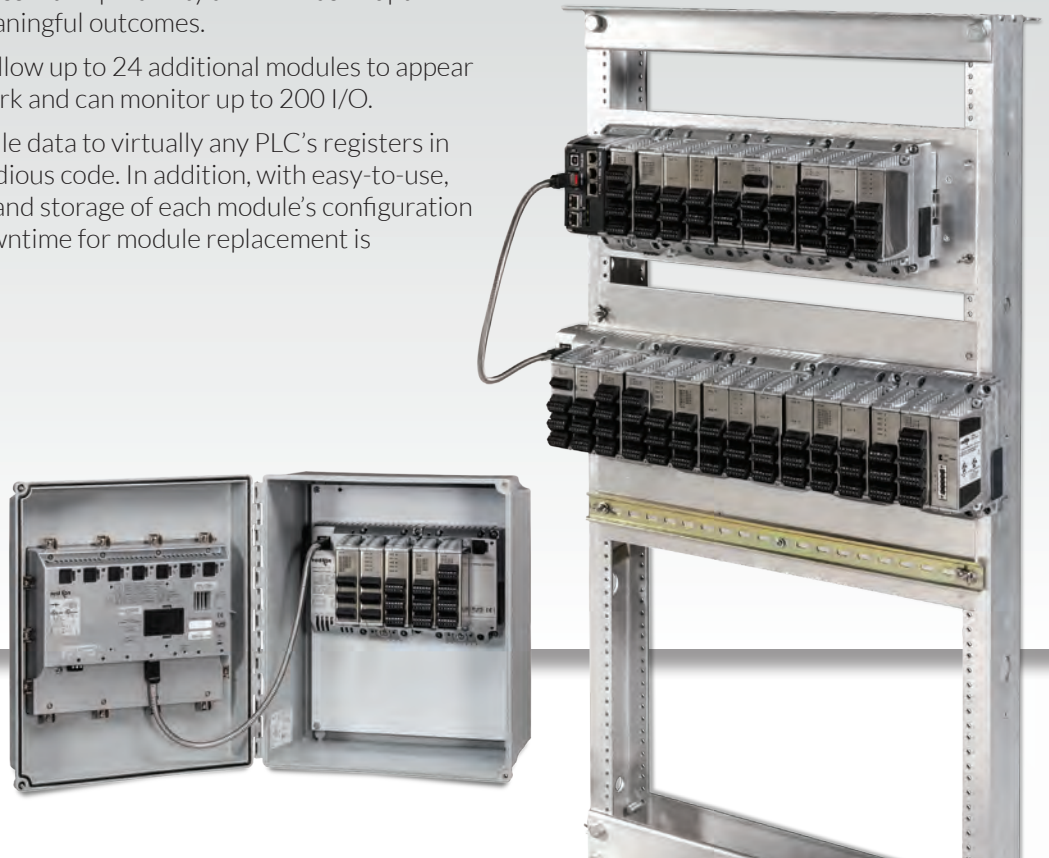
* Modules or host devices may restrict temperature; refer to module documentation.

EVER-EXPANDABLE SOLUTIONS

No matter what is being monitored, the ability to collect and control critical parameters, effortless interoperability and increased uptime are all key to delivering meaningful outcomes.

Graphite expansion racks allow up to 24 additional modules to appear as a single node on a network and can monitor up to 200 I/O.

Simply drag and drop module data to virtually any PLC's registers in seconds without writing tedious code. In addition, with easy-to-use, direct wiring terminations and storage of each module's configuration on the controller itself, downtime for module replacement is dramatically decreased.





GRAPHITE I/O MODULES

- Works with all plug-and-play module slots across Graphite series
- Provides scalable all-in-one platform to help integrate complex multi-vendor environments
- Rugged metal enclosure



DATA ACQUISITION MODULES

Model Number	Input(s)	Input Type	Control Output(s)	Analog Output
GMDIOR00	8 - Digital	DC Inputs or Switch Closures	6 - Relays	-
GMDIOS00	8 - Digital	DC Inputs or Switch Closures	6 - SSR	-
GMINI800	8 - DC Current	0/4 to 20mA Inputs	-	-
GMINV800	8 - DC Volt	+/- 10 V Inputs	-	-
GMOUT400	-	-	4 - Analog	+/- 10 V or 0/4 to 20 mA
GMTC8000	8 - Thermocouple	T, E, J, K, R, S, B, N, C and Millivolt	-	-
GMRTD600	6 - RTD	385, 392, 428, 672 and Ohms	-	-
GMSG10R0	1 - Strain Gage	±20 mV, ±33 mV, or ±200 mV	3 - Relays	+/- 10 V or 0/4 to 20 mA
GMSG10S0	1 - Strain Gage	±20 mV, ±33 mV, or ±200 mV	3 - SSR	+/- 10 V or 0/4 to 20 mA
GMSG11R0	2 - Strain Gage	±20 mV, ±33 mV, or ±200 mV	3 - Relays	+/- 10 V or 0/4 to 20 mA
GMSG11S0	2 - Strain Gage	±20 mV, ±33 mV, or ±200 mV	3 - SSR	+/- 10 V or 0/4 to 20 mA
GMUIN400	4 - Universal	0/4 to 20 mA, 0 to 10 V, Thermocouple or RTD	-	-

FULL PID CONTROL MODULES

Model Number	Input(s)	Input Type	Control Output(s)	Analog Output
GMP1RA00	Single PID Loop	3 - Relays	+/- 10 V or 0/4 to 20 mA	-
GMP1RM00	Single PID Loop	3 - Relays	-	Heater Current Monitor
GMP1SA00	Single PID Loop	4 - SSR	+/- 10 V or 0/4 to 20 mA	-
GMP1SM00	Single PID Loop	4 - SSR	-	Heater Current Monitor
GMP2R000	Dual PID Loops	4 - Relays	-	-
GMP2RM00	Dual PID Loops	4 - Relays	-	Heater Current Monitor
GMP2S000	Dual PID Loops	4 - SSR	-	-
GMP2SM00	Dual PID Loops	4 - SSR	-	Heater Current Monitor

COMMUNICATION MODULES

Model Number	Function
GMCAN000	CAN Communication
GMJ19390	J1939 Communication
GMDN0000	DeviceNet Communication
GMPBDP00	PROFIBUS DP Communication

CRIMSON CONTROL MODULE

Model Number	Function
GMCC0000	Graphite Module, Enables Crimson Control on HMI

See product manuals for model-specific certifications. Specifications are subject to change. Visit www.redlion.net for more information.

E3 I/O™ MODULES

- ▲ Wide variety of mixed I/O configurations
- ▲ Industrial design supporting deployment in extreme environments
- ▲ Real-Time Ring and dual-ethernet ports for powerful network redundancy
- ▲ Built-in security proactively blocks unwanted access



Model Number	Function	DI	DO	AI	AO	Operating Temp.
E3-MIX20884-1	32 Mixed Inputs/Outputs	20**	8*	8	4	-40° to 75°C
E3-MIX24880-1	32 Mixed Inputs/Outputs	24**	8*	8	-	-40° to 75°C
E3-MIX24882-1	34 Mixed Inputs/Outputs	24**	8*	8	2	-40° to 75°C
E3-32DI24-1	32 24 V Digital Inputs	32	-	-	-	-40° to 75°C
E3-16DI24-1	16 24 V Digital Inputs	16	-	-	-	-40° to 75°C
E3-16DIAC-1	16 120 VAC Digital Inputs	16	-	-	-	-40° to 75°C
E3-32DO24-1	32 24 V Digital Outputs	-	32	-	-	-40° to 75°C
E3-16DO24-1	16 24 V Digital Outputs	-	16	-	-	-40° to 75°C
E3-16DORLY-1	16 Digital Output Relays (Form A and Form C)	-	16	-	-	-40° to 75°C
E3-16ISO20M-1	16 Isolated Analog Inputs (4-20 mA)	-	-	16	-	-40° to 75°C
E3-32AI20M-1	32 Analog Inputs (4-20 mA)	-	-	32	-	-40° to 75°C
E3-32AI10V-1	32 Analog Inputs (0-10 VDC)	-	-	32	-	-40° to 75°C
E3-16AI20M-1	16 Analog Inputs (4-20 mA)	-	-	16	-	-40° to 75°C
E3-16AI8AO-1	16 Analog Inputs / 8 Analog Outputs (4-20 mA)	-	-	16	8	-40° to 75°C
E3-8AO20M-1	8 Analog Outputs (4-20 mA)	-	-	-	8	-40° to 75°C
E3-16ISOTC-1	16 Isolated Thermocouple Inputs	-	-	16TC	-	-40° to 75°C
E3-10RTD-1	10 RTD Inputs	-	-	10 RTD	-	-40° to 75°C

* Configurable as DI or DO.

** Last 8 are configurable as DI or DO.

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 21 years and counting.

- ▲ Decades of proven reliability
- ▲ Wide model range supports varying requirements
- ▲ Field-upgradeable I/O and communication cards

Feature	PM-50 Series	PAX2 Series	PAX Series	PAX Lite Series	C48 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® 2 1/8 DIN ADVANCED UNIVERSAL PANEL METER

- ▲ Digital or analog input models
- ▲ Dual-line, tri-color display
- ▲ Up to 16 alarms with color changing display



Model Number	Function	Display Length	Display Height	LED	Power	Retrans. Analog	Comm. Capability
PAX2D000	Dual Counter or Counter/Rate	6 Digit (T), 9 Digit (B)	0.71" (18 mm), 0.35" (9 mm)	LCD, Tri-Color	Universal AC or DC	Yes	Yes
PAX2A000	Universal DC Analog Meter	6 Digit (T), 9 Digit (B)	0.71" (18 mm), 0.35" (9 mm)	LCD, Tri-Color	Universal AC or DC	Yes	Yes
PAX2S000	Strain Gauge Meter	6 Digit (T), 9 Digit (B)	0.71" (18 mm), 0.35" (9 mm)	LCD, Tri-Color	Universal AC or DC	Yes	Yes

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

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
PAXI0120	Dual Counter or Count/Rate	6 Digit	0.56" (14 mm)	Green	AC	Yes	Yes
PAXI0130	Dual Counter or Count/Rate	6 Digit	0.56" (14 mm)	Green	DC	Yes	Yes
PAXC0020	Counter	6 Digit	0.56" (14 mm)	Red	AC	-	-
PAXC0030	Counter	6 Digit	0.56" (14 mm)	Red	DC	-	-
PAXC0120	Counter	6 Digit	0.56" (14 mm)	Green	AC	-	-
PAXC0130	Counter	6 Digit	0.56" (14 mm)	Green	DC	-	-
PAXR0020	Rate Meter	6 Digit	0.56" (14 mm)	Red	AC	-	-
PAXR0030	Rate Meter	6 Digit	0.56" (14 mm)	Red	DC	-	-
PAXR0120	Rate Meter	6 Digit	0.56" (14 mm)	Green	AC	-	-
PAXR0130	Rate Meter	6 Digit	0.56" (14 mm)	Green	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
PAXCK100	Real-Time Clock	6 Digit	0.56" (14 mm)	Green	AC	-	Yes
PAXCK110	Real-Time Clock	6 Digit	0.56" (14 mm)	Green	DC	-	Yes
PAXTM000	Timer	6 Digit	0.56" (14 mm)	Red	AC	-	Yes
PAXTM010	Timer	6 Digit	0.56" (14 mm)	Red	DC	-	Yes
PAXTM100	Timer	6 Digit	0.56" (14 mm)	Green	AC	-	Yes
PAXTM110	Timer	6 Digit	0.56" (14 mm)	Green	DC	-	Yes

ANALOG

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
PAXD0100	Universal DC Analog Meter	6 Digit	0.56" (14 mm)	Green	AC	Yes	Yes
PAXD0110	Universal DC Analog Meter	6 Digit	0.56" (14 mm)	Green	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
PAXH0000	AC Current/Voltage Meter	4 1/2 Digit	0.56" (14 mm)	Green	AC	Yes	Yes
PAXH0100	AC Current/Voltage Meter	4 1/2 Digit	0.56" (14 mm)	Green	AC	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
PAXP0100	Process Meter	4 1/2 Digit	0.56" (14 mm)	Green	AC	Yes	Yes
PAXP0110	Process Meter	4 1/2 Digit	0.56" (14 mm)	Green	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
PAXS0100	Strain Gage Meter	4 1/2 Digit	0.56" (14 mm)	Green	AC	Yes	Yes
PAXS0110	Strain Gage Meter	4 1/2 Digit	0.56" (14 mm)	Green	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
PAXT0100	Universal Temperature Meter	4 1/2 Digit	0.56" (14 mm)	Green	AC	Yes	Yes
PAXT0110	Universal Temperature Meter	4 1/2 Digit	0.56" (14 mm)	Green	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	-

C48 1/16 DIN PRESET COUNTER & TIMER METERS

- ▲ Single, dual and batch output(s) models
- ▲ Sinking and sourcing sensor input operation
- ▲ Two-line, six-digit display in red/green or reflective LCD



COUNTER

Model Number	Function	Display	Power	O.C. Output	Relay Output(s)	Comms
C48CS113	Single Preset Counter	Green/Red with Backlight	DC	Yes	Yes	-
C48CS003	Single Preset Counter	Black Reflective	AC	Yes	Yes	-
C48CS013	Single Preset Counter	Black Reflective	DC	Yes	Yes	-
C48CS103	Single Preset Counter	Green/Red with Backlight	AC	Yes	Yes	-
C48CD102	Dual Preset Counter	Green/Red with Backlight	AC	-	Yes	-
C48CD105	Dual Preset Counter	Green/Red with Backlight	AC	Yes	-	Yes
C48CD107	Dual Preset Counter	Green/Red with Backlight	AC	-	Yes	Yes
C48CD110	Dual Preset Counter	Green/Red with Backlight	DC	Yes	-	-
C48CD112	Dual Preset Counter	Green/Red with Backlight	DC	-	Yes	-
C48CD002	Dual Preset Counter	Black Reflective	AC	-	Yes	-
C48CD005	Dual Preset Counter	Black Reflective	AC	Yes	-	Yes
C48CD007	Dual Preset Counter	Black Reflective	AC	-	Yes	Yes
C48CD100	Dual Preset Counter	Green/Red with Backlight	AC	Yes	-	-
C48CB003	Batch Counter	Black Reflective	AC	Yes	Yes	-
C48CB100	Batch Counter	Green/Red with Backlight	AC	Yes	-	-
C48CB103	Batch Counter	Green/Red with Backlight	AC	Yes	Yes	-
C48CB105	Batch Counter	Green/Red with Backlight	AC	Yes	-	Yes
C48CB108	Batch Counter	Green/Red with Backlight	AC	Yes	Yes	Yes
C48CB110	Batch Counter	Green/Red with Backlight	DC	Yes	-	-

TIMER

Model Number	Function	Display	Power	O.C. Output	Relay Output(s)	Comms
C48TS003	Single Preset Timer	Black Reflective	AC	Yes	Yes	-
C48TS013	Single Preset Timer	Black Reflective	DC	Yes	Yes	-
C48TS103	Single Preset Timer	Green/Red with Backlight	AC	Yes	Yes	-
C48TS113	Single Preset Timer	Green/Red with Backlight	DC	Yes	Yes	-
C48TD012	Dual Preset Timer	Black Reflective	DC	-	Yes	-
C48TD102	Dual Preset Timer	Green/Red with Backlight	AC	-	Yes	-
C48TD105	Dual Preset Timer	Green/Red with Backlight	AC	Yes	-	Yes
C48TD107	Dual Preset Timer	Green/Red with Backlight	AC	-	Yes	Yes
C48TD112	Dual Preset Timer	Green/Red with Backlight	DC	-	Yes	-
C48TD117	Dual Preset Timer	Green/Red with Backlight	DC	-	Yes	Yes

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
CUB4L010	Counter	6 Digit	0.48" (12 mm)	Green Backlight
CUB4L020	Counter	6 Digit	0.48" (12 mm)	Red Backlight
CUB4L800	Counter	8 Digit	0.46" (12 mm)	Reflective
CUB4L810	Counter	8 Digit	0.46" (12 mm)	Green Backlight
CUB4L820	Counter	8 Digit	0.46" (12 mm)	Red Backlight
CUB4V000	DC Volt Meter	3 1/2 Digit	0.6" (15 mm)	Reflective
CUB4V010	DC Volt Meter	3 1/2 Digit	0.6" (15 mm)	Green Backlight
CUB4V020	DC Volt Meter	3 1/2 Digit	0.6" (15 mm)	Red Backlight
CUB4CL10	Current Loop Meter	3 1/2 Digit	0.6" (15 mm)	Green Backlight, Negative Image
CUB4CL20	Current Loop Meter	3 1/2 Digit	0.6" (15 mm)	Red Backlight, Negative Image
CUB4CL30	Current Loop Meter	3 1/2 Digit	0.6" (15 mm)	Green Backlight, Positive Image
CUB4CL40	Current Loop Meter	3 1/2 Digit	0.6" (15 mm)	Red Backlight, Positive Image
CUB4I000	DC Current Meter	3 1/2 Digit	0.6" (15 mm)	Reflective
CUB4I010	DC Current Meter	3 1/2 Digit	0.6" (15 mm)	Green Backlight
CUB4I020	DC Current Meter	3 1/2 Digit	0.6" (15 mm)	Red Backlight
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
CUB7CCGO	Counter	Backlight Green	28 VDC max	-
CUB7CCRO	Counter	Backlight Red	28 VDC max	-
CUB7CCSO	Counter	Reflective	28 VDC max	-
CUB7CVGO	Counter	Backlight Green	50 to 250 VAC/VDC	-
CUB7CVRO	Counter	Backlight Red	50 to 250 VAC/VDC	-
CUB7CVSO	Counter	Reflective	50 to 250 VAC/VDC	-
CUB7TCGO	Timer	Backlight Green	28 VDC max	Time when input is low
CUB7TCG1	Timer	Backlight Green	28 VDC max	Time when input is high
CUB7TCRO	Timer	Backlight Red	28 VDC max	Time when input is low
CUB7TCR1	Timer	Backlight Red	28 VDC max	Time when input is high
CUB7TCSO	Timer	Reflective	28 VDC max	Time when input is low
CUB7TCS1	Timer	Reflective	28 VDC max	Time when input is high
CUB7TVGO	Timer	Backlight Green	50 to 250 VAC/VDC	Time when input is low
CUB7TVRO	Timer	Backlight Red	50 to 250 VAC/VDC	Time when input is low
CUB7TVSO	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
LD4S56P0	Serial Slave	6	-	Yes	Yes
LD4T06P0	Timer	6	Yes	Yes	Yes

* Not UL Listed.



LPAX 1.5" LARGE DISPLAY, FIELD-INSTALLABLE OPTION CARDS

- ▲ 1.5-inch (38 mm) LED digits with adjustable intensity
- ▲ AC or DC power input models
- ▲ Easily add communication, setpoint and retransmitted analog functionality with option cards



Model Number	Function	Digits	Setpoints	Comms	Key Features
LPAX0500	Display for Analog Input Modules	5	Yes	Yes	Analog Output
LPAX0600	Display for Digital Input Modules	6	Yes	Yes	Analog Output
LPAXCK00	Display for MPAXCK Module	6	Yes	Yes	-
LPAXDA00	Display for MPAXDP Module	5	Yes	Yes	Analog Output



EPAX 4" LARGE DISPLAY, FIELD-INSTALLABLE OPTION CARDS

- ▲ Four-inch (101 mm) LED digits with adjustable intensity
- ▲ 85 to 250 VAC power input
- ▲ Easily add communication, setpoint and retransmitted analog functionality with option cards



Model Number	Function	Digits	Setpoints	Comms	Key Features
EPAX0500	Display for Analog Input Modules	5	Yes	Yes	Analog Output
EPAX0600	Display for Digital Input Modules	6	Yes	Yes	Analog Output

SECURE REMOTE ACCESS

Red Lion's Secure Remote Access platform provides the ability to remotely access and visualize data from a single, centralized location. This is IIoT in a box, providing everything you need for a fast and easy IIoT solution.

- ▲ Deploy remote access in under 2 minutes
- ▲ Easily restrict users or groups to specific projects, devices, IP addresses or ports
- ▲ Securely access industrial equipment behind firewalls easily, from anywhere
- ▲ Centralized management simplifies the complexities of user, device, and network administration

Model Number	Remote Access	Data Monitoring	Keyed Security	Integrated Ethernet Switch	WAN Ethernet Port	Wi-Fi Communication	Cellular Communication	Serial Communication	RLConnect24	Open VPN	Ipsec, L2TP, PPTP	Simply-Connect	Description
RA50C-R000R-000D0	Y			3	1				Y				Compact Remote Access Router LAN/WAN
RA50C-R4A0R-000D0	Y			3	1		Y		Y				Compact Remote Access Router 4G Cellular
RA50C-R0W0R-000D0	Y			3	1	Y			Y				Compact Remote Access Router Wi-Fi
RA70S-R000V-0S0D0	Y	Y		4	1				Y	Y		Y	Remote Access Router LAN/WAN
RA70S-R4A0V-1S0D0	Y	Y		4	1		Y		Y	Y	Y	Y	Remote Access Router 4G Cellular
RA70K-R001V-1S0D0	Y	Y	Y	4	1			Y	Y	Y	Y	Y	Keyed Remote Access Router Serial
RA70K-R000V-1S0D0	Y	Y	Y	4	1				Y	Y	Y	Y	Keyed Remote Access Router LAN/WAN
RA70K-R4A0V-1S0D0	Y	Y	Y	4	1		Y		Y	Y	Y	Y	Keyed Remote Access Router 4G Cellular

COMPACT INDUSTRIAL FIREWALL

This automation-friendly firewall protects your application from attacks by segmenting your production network into manageable and logically separated units. With network learning capabilities, this intelligent firewall does the hard work for you.



Model Number	Description
RA10C-000000-000D0	Compact Industrial Firewall

DATA ACQUISITION

With support for more than 300 industrial protocols, Red Lion helps devices from different manufacturers communicate. Our Crimson software uses drag-and-drop mapping functionality to seamlessly integrate data collection across disparate devices and protocols.

- ▲ Support for more than 300+ industrial protocols
- ▲ Easily configured using Crimson software
- ▲ Offers a variety of physical communication ports

DATA ACQUISITION

Model Number	Hazardous Location Certifications				Operating Temp.	Serial		Ethernet Ports	USB Port (Optional)	Expansion Options (Optional)	
	UL Class 1, Division 2	ATEX	ABS	DNV		RS232	RS485	10/100 Base TX	USB Host	Communication (Expansion)	Memory (Card Support)
DA10D	N	N	N	N	10° to 50°C	Up to 2	Up to 1	1			
DA30D	Y	N	N	N	10° to 50° C	2	1	1	1	1	SD Card
DA50A	Y	Y	Coming Soon	Coming Soon	-40° to 75°C	1	1	2		1	MicroSD
DA70A	Y	Y	Coming Soon	Coming Soon	-40° to 75°C	Up to 2	Up to 2	2	1	3	MicroSD

FLEXEDGE

Red Lion's FlexEdge platform operates using field-unlockable software, enabling the gateway to be used as a feature-packed networking gateway all the way to an advanced automation controller. All this without the need to add additional equipment – saving money and costly downtime.



	Group 1 Networking	Group 2 Protocol	Group 3 IIoT	Group 4 Controller
Configuration				
Web GUI	●	●	●	●
Crimson	●	●	●	●
Networking				
Firewall	●	●	●	●
RADIUS Auth.	●	●	●	●
Routing	●	●	●	●
NAT	●	●	●	●
IP Fallback	●	●	●	●
Serial-IP Encapsulation	●	●	●	●
VPN Client/Server	●	●	●	●
Automation				
300+ Drivers		● *	●	●
IIoT Connectors		●	●	●
OPC UA		●	●	●
SQL Sync			●	●
Data Logging			●	●
Virtual HMI			●	●
Advanced Web Server			●	●
IEC Control				
Crimson Control				●

* DNP3 and BACnet drivers are not included in Group 2 product.

FLEXEDGE COMMUNICATION SLEDS

- ▲ Field installable
- ▲ Industrial-rated for hazardous locations
- ▲ Wide operating temperature range
- ▲ Seamlessly expand communications



Model Number	Description
DA-S00-CL9C4S-AM-000	4G LTE (Cat. 4) Cellular Sled for North America (AT&T, others)
DA-S00-CL9C4S-VZ-000	4G LTE (Cat. 4) Cellular Sled for North America (Verizon)
DA-S00-CL9C4S-EU-000	4G LTE (Cat. 4) Cellular Sled for EU, SE Asia, and Asia Pacific
DA-S00-CL9C1S-AZ-000	4G LTE (Cat. 1) Cellular Sled for Australia
DA-S00-WF10N0-AM-000	802.11 b/g/n Wi-Fi Sled
DA-S00-PN1EE2-00-000	Dual 10/100Base-TX Ethernet Port Sled
DA-S00-PN40U4-00-000	One Port USB 2.0 Host Sled
DA-S00-PN2221-IS-000	Dual Isolated RS-232 Ports Sled
DA-S00-PN2442-IS-000	Dual Isolated RS-485 Ports Sled
DA-S00-PN2245-IS-000	Mixed Isolated RS-232/RS-485 Ports Sled

Sleds are compatible with both DA50A and DA70A controllers.
Cellular Sleds feature multi-carrier support and network fail-over.

FLEXEDGE I/O MODULES

- ▲ Field installable
- ▲ Wide operating temperature range
- ▲ Zero-config hot-swap replacement
- ▲ UL Class 1, Division 2 and ATEX/IECEx certifications*



* I/O modules with relay are not ATEX/IECEx certified

	Model Number	Description	AI	DI	AO	DO	Relay
DA70	DA-M00-10UIIN6-IO-000	FlexEdge 6 Universal Inputs Module	6				
	DA-M00-100UT8-IO-000	FlexEdge 8 Analog Outputs Module			8		
	DA-M00-10DI0R-00-000	FlexEdge 8 Digital Inputs, 8 Relay Outputs Module		8			8
	DA-M00-10-DI00-00-000	FlexEdge 8 Digital Inputs, 8 SSR Outputs Module		8		8	
	DA-M00-PD-P1RA-00-000	FlexEdge Single PID, Relay & Analog Output Module	1		1		2 Form-A 2 Form-C
	DA-M00-PD-P1SA-00-000	FlexEdge Single PID, SSR & Analog Output Module	1		1	3	
	DA-M00-PD-P2R0-00-000	FlexEdge Dual PID, Relay Outputs Module	2				3 Form-A 1 Form-C
	DA-M00-PD-P2S0-00-000	FlexEdge Dual PID, SSR Outputs Module	2			4	
	DA-M00-PD-P2SM-00-000	FlexEdge Dual PID, SSR and HCM Module	2 + 2 HCM			4	
	DA-M00-10-8R00-00-000	FlexEdge 8 Relay Outputs Module					8 Form-C
	DA-M00-10-IN4D-AO-000	FlexEdge 4UI Mixed I/O Module	4	3*	2	3*	
	DA-M00-10-IN2D-AO-000	FlexEdge 2UI Mixed I/O Module	2	8*	2	8*	

* Configurable as DI or DO.
I/O modules are compatible with DA70A Group 2+ controllers.

DATA ACQUISITION GATEWAYS

- ▲ Supports over 300 industrial drivers
- ▲ Industrial environment specifications:
 - Wide operating temperature
 - High shock & vibration tolerance
 - UL Class 1, Division 2 (model dependent)
- ▲ Real-time data, event & security logging with cryptographic signature support (model dependent)



Model Number	Description
DA10D0C000000000	Data Acquisition Protocol Converter
DA30D0F000000000	High-Performance Protocol Converter, Data Logger, Web Server and Virtual HMI

	Model Number	Description
DA30D	CRM000CMCAN00000	CAN Communication Module
	CRM000CMDN000000	DeviceNet Communication Module
	CRM000CMJ1939000	J1939 Communication Module
	CRM000CMPBDP0000	PROFIBUS DP Communication Module



GRAPHITE EDGE CONTROLLER

- ▲ Unparalleled expansion capabilities using plug-in modules
- ▲ Support for 300+ industrial protocols, up to 13 simultaneous conversions
- ▲ Built-in data logging (SD card), web server and FTP for remote access
- ▲ Add up to four (GEXRACK2) Expansion Racks with integrated port
- ▲ Send email and/or SMS based on alarm conditions
- ▲ All models UL Class 1, Division 2 Listed for hazardous locations



Model Number	Serial Ports	Ethernet Ports	USB Host	Expansion	Card Support	Operating Temp.
GRAC0001	3 iso.	2	2	1 Module Slot	SD Card	-40° to 70°C*

* Lowest range among equipment used in your Graphite system: refer to user manual.

GRAPHITE EXPANSION RACK

Model Number	Function
GEXRACK1	Graphite Wide Expansion Rack for Modules
GEXRACK2	Graphite Standard Expansion Rack for Modules
CBLUSBM0	USB Tethering Cable, 0.5 M Metal Jacketed
CBLUSBM1	USB Tethering Cable, 1 M Metal Jacketed
CBLUSBM2	USB Tethering Cable, 2 M Metal Jacketed

DATA ACQUISITION MODULES

Model Number	Input(s)	Input Type	Control Output(s)	Analog Output
GMDIOR00	8 - Digital	DC Inputs or Switch Closures	6 - Relays	-
GMDIOS00	8 - Digital	DC Inputs or Switch Closures	6 - SSR	-
GMINI800	8 - DC Current	0/4 to 20mA Inputs	-	-
GMINV800	8 - DC Volt	+/- 10 V Inputs	-	-
GMOUT400	-	-	4 - Analog	+/- 10 V or 0/4 to 20 mA
GMTC8000	8 - Thermocouple	T, E, J, K, R, S, B, N, C and Millivolt	-	-
GMRTD600	6 - RTD	385, 392, 428, 672 and Ohms	-	-
GMSG10R0	1 - Strain Gage	±20 mV, ±33 mV, or ±200 mV	3 - Relays	+/- 10 V or 0/4 to 20 mA
GMSG10S0	1 - Strain Gage	±20 mV, ±33 mV, or ±200 mV	3 - SSR	+/- 10 V or 0/4 to 20 mA
GMSG11R0	2 - Strain Gage	±20 mV, ±33 mV, or ±200 mV	3 - Relays	+/- 10 V or 0/4 to 20 mA
GMSG11S0	2 - Strain Gage	±20 mV, ±33 mV, or ±200 mV	3 - SSR	+/- 10 V or 0/4 to 20 mA
GMUIN400	4 - Universal	0/4 to 20 mA, 0 to 10 V, Thermocouple or RTD	-	-

FULL PID CONTROL MODULES

Model Number	Input(s)	Input Type	Control Output(s)	Analog Output
GMP1RA00	Single PID Loop	3 - Relays	+/- 10 V or 0/4 to 20 mA	-
GMP1RM00	Single PID Loop	3 - Relays	-	Heater Current Monitor
GMP1SA00	Single PID Loop	4 - SSR	+/- 10 V or 0/4 to 20 mA	-
GMP1SM00	Single PID Loop	4 - SSR	-	Heater Current Monitor
GMP2R000	Dual PID Loops	4 - Relays	-	-
GMP2RM00	Dual PID Loops	4 - Relays	-	Heater Current Monitor
GMP2S000	Dual PID Loops	4 - SSR	-	-
GMP2SM00	Dual PID Loops	4 - SSR	-	Heater Current Monitor

COMMUNICATION MODULES

Model Number	Function
GMCAN000	CAN Communication
GMJ19390	J1939 Communication
GMDN0000	DeviceNet Communication
GMPBDP00	PROFIBUS DP Communication

CRIMSON CONTROL MODULE

Model Number	Function
GMCC0000	Graphite Module, Enables Crimson Control on HMI

See product manuals for model-specific certifications. Specifications are subject to change. Visit www.redlion.net for more information.

PID CONTROLLERS

From single to multi-point control, Red Lion has the right proportional-integral-derivative (PID) controller for any application. Our wide range of easy-to-deploy PID controllers offer industry-leading features and reliable performance designed for the most demanding applications.

- ▲ Panel or DIN-rail mountable models
- ▲ Optional modular expansion cards
- ▲ Programmable via Crimson software

Feature	PAX2C	PXU	Modular Controller	DLC
DIN Size(s)	1/8	1/16, 1/8, 1/4		
Mounting	Panel	Panel	DIN-Rail	DIN-Rail
Display	Dual-Line	Dual-Line	Virtual	
Bar Graph on Display	●			
PID Control Zones	3*	1	32*	2
Universal Inputs	●	●		
Alarms	●	●	●	●
Protocol Conversion			●	
Built-in Communication	●	Optional	●	●
Expansion Card Slots	3		16	
Power Input	AC/DC	AC or DC	DC	DC

*Requires expansion modules.

PXU BASIC UNIVERSAL PID CONTROLLERS

- ▲ Universal inputs (temperature or process)
- ▲ 4-20 relay or solid state outputs
- ▲ Available in 1/4, 1/8 and 1/16 DIN models
- ▲ Optional RS-485 communication



Model Number	DIN Size	Main Control	Secondary Control	Control Input	Output (Retrans)	RS485 Comms	User Inputs	Power
PXU10020	1/16 DIN	Relay Output	-	-	-	-	-	AC
PXU100B0	1/16 DIN	Relay Output	-	-	-	-	-	DC
PXU11A20	1/16 DIN	Dual Relay Output	Relay	-	-	Yes	2	AC
PXU11AB0	1/16 DIN	Dual Relay Output	Relay	-	-	Yes	2	DC
PXU11B20	1/16 DIN	Dual Relay Output	Relay	CT Input	-	Yes	1	AC
PXU11BB0	1/16 DIN	Dual Relay Output	Relay	CT Input	-	Yes	1	DC
PXU11C20	1/16 DIN	Dual Relay Output	Relay	-	Analog	Yes	1	AC
PXU11CB0	1/16 DIN	Dual Relay Output	Relay	-	Analog	Yes	1	DC
PXU11D20	1/16 DIN	Dual Relay Output	Relay	Remote Setpoint	-	Yes	1	AC
PXU11DB0	1/16 DIN	Dual Relay Output	Relay	Remote Setpoint	-	Yes	1	DC
PXU20020	1/16 DIN	Solid State Output	-	-	-	-	-	AC
PXU200B0	1/16 DIN	Solid State Output	-	-	-	-	-	DC
PXU21A20	1/16 DIN	Logic/Relay	Relay	-	-	Yes	2	AC
PXU21AB0	1/16 DIN	Logic/Relay	Relay	-	-	Yes	2	DC
PXU21B20	1/16 DIN	Logic/Relay	Relay	CT Input	-	Yes	1	AC
PXU21BB0	1/16 DIN	Logic/Relay	Relay	CT Input	-	Yes	1	DC
PXU21C20	1/16 DIN	Logic/Relay	Relay	-	Analog	Yes	1	AC
PXU21CB0	1/16 DIN	Logic/Relay	Relay	-	Analog	Yes	1	DC
PXU21D20	1/16 DIN	Logic/Relay	Relay	Remote Setpoint	-	Yes	1	AC
PXU21DB0	1/16 DIN	Logic/Relay	Relay	Remote Setpoint	-	Yes	1	DC
PXU30020	1/16 DIN	4 to 20 mA	-	-	-	-	-	AC
PXU300B0	1/16 DIN	4 to 20 mA	-	-	-	-	-	DC
PXU31A20	1/16 DIN	4 to 20 mA	Relay	-	-	Yes	2	AC
PXU31AB0	1/16 DIN	4 to 20 mA	Relay	-	-	Yes	2	DC
PXU31B20	1/16 DIN	4 to 20 mA	Relay	CT Input	-	Yes	1	AC
PXU31BB0	1/16 DIN	4 to 20 mA	Relay	CT Input	-	Yes	1	DC
PXU31C20	1/16 DIN	4 to 20 mA	Relay	-	Analog	Yes	1	AC
PXU31CB0	1/16 DIN	4 to 20 mA	Relay	-	Analog	Yes	1	DC
PXU31D20	1/16 DIN	4 to 20 mA	Relay	Remote Setpoint	-	Yes	1	AC
PXU31DB0	1/16 DIN	4 to 20 mA	Relay	Remote Setpoint	-	Yes	1	DC
PXU40020	1/16 DIN	0 to 10 VDC	-	-	-	-	-	AC
PXU400B0	1/16 DIN	0 to 10 VDC	-	-	-	-	-	DC
PXU41A20	1/16 DIN	0 to 10 VDC	Relay	-	-	Yes	2	AC
PXU41AB0	1/16 DIN	0 to 10 VDC	Relay	-	-	Yes	2	DC
PXU41B20	1/16 DIN	0 to 10 VDC	Relay	CT Input	-	Yes	1	AC
PXU41BB0	1/16 DIN	0 to 10 VDC	Relay	CT Input	-	Yes	1	DC
PXU41C20	1/16 DIN	0 to 10 VDC	Relay	-	Analog	Yes	1	AC
PXU41CB0	1/16 DIN	0 to 10 VDC	Relay	-	Analog	Yes	1	DC
PXU41D20	1/16 DIN	0 to 10 VDC	Relay	Remote Setpoint	-	Yes	1	AC
PXU41DB0	1/16 DIN	0 to 10 VDC	Relay	Remote Setpoint	-	Yes	1	DC
PXU10030	1/8 DIN	Relay Output	-	-	-	-	-	AC
PXU100C0	1/8 DIN	Relay Output	-	-	-	-	-	DC
PXU11A30	1/8 DIN	Dual Relay Output	Relay	-	-	Yes	2	AC
PXU11AC0	1/8 DIN	Dual Relay Output	Relay	-	-	Yes	2	DC

PXU BASIC UNIVERSAL PID CONTROLLERS

Model Number	DIN Size	Main Control	Secondary Control	Control Input	Output (Retrans)	RS485 Comms	User Inputs	Power
PXU11B30	1/8 DIN	Dual Relay Output	Relay	CT Input	-	Yes	1	AC
PXU11BCO	1/8 DIN	Dual Relay Output	Relay	CT Input	-	Yes	1	DC
PXU11C30	1/8 DIN	Dual Relay Output	Relay	-	Analog	Yes	1	AC
PXU11CCO	1/8 DIN	Dual Relay Output	Relay	-	Analog	Yes	1	DC
PXU11D30	1/8 DIN	Dual Relay Output	Relay	Remote Setpoint	-	Yes	1	AC
PXU11DCO	1/8 DIN	Dual Relay Output	Relay	Remote Setpoint	-	Yes	1	DC
PXU20030	1/8 DIN	Solid State Output	-	-	-	-	-	AC
PXU200CO	1/8 DIN	Solid State Output	-	-	-	-	-	AC
PXU21A30	1/8 DIN	Logic/Relay	Relay	-	-	Yes	2	AC
PXU21ACO	1/8 DIN	Logic/Relay	Relay	-	-	Yes	2	DC
PXU21B30	1/8 DIN	Logic/Relay	Relay	CT Input	-	Yes	1	AC
PXU21BCO	1/8 DIN	Logic/Relay	Relay	CT Input	-	Yes	1	DC
PXU21C30	1/8 DIN	Logic/Relay	Relay	-	Analog	Yes	1	AC
PXU21CCO	1/8 DIN	Logic/Relay	Relay	-	Analog	Yes	1	DC
PXU21D30	1/8 DIN	Logic/Relay	Relay	Remote Setpoint	-	Yes	1	AC
PXU21DCO	1/8 DIN	Logic/Relay	Relay	Remote Setpoint	-	Yes	1	DC
PXU30030	1/8 DIN	4 to 20 mA	-	-	-	-	-	AC
PXU31A30	1/8 DIN	4 to 20 mA	Relay	-	-	Yes	2	AC
PXU31ACO	1/8 DIN	4 to 20 mA	Relay	-	-	Yes	2	DC
PXU31B30	1/8 DIN	4 to 20 mA	Relay	CT Input	-	Yes	1	AC
PXU31BCO	1/8 DIN	4 to 20 mA	Relay	CT Input	-	Yes	1	DC
PXU31C30	1/8 DIN	4 to 20 mA	Relay	-	Analog	Yes	1	AC
PXU31CCO	1/8 DIN	4 to 20 mA	Relay	-	Analog	Yes	1	DC
PXU31D30	1/8 DIN	4 to 20 mA	Relay	Remote Setpoint	-	Yes	1	AC
PXU31DCO	1/8 DIN	4 to 20 mA	Relay	Remote Setpoint	-	Yes	1	DC
PXU40030	1/8 DIN	0 to 10 VDC	-	-	-	-	-	AC
PXU400CO	1/8 DIN	0 to 10 VDC	-	-	-	-	-	DC
PXU41B30	1/8 DIN	0 to 10 VDC	Relay	CT Input	-	Yes	1	AC
PXU41BCO	1/8 DIN	0 to 10 VDC	Relay	CT Input	-	Yes	1	DC
PXU41C30	1/8 DIN	0 to 10 VDC	Relay	-	Analog	Yes	1	AC
PXU41CCO	1/8 DIN	0 to 10 VDC	Relay	-	Analog	Yes	1	AC
PXU41D30	1/8 DIN	0 to 10 VDC	Relay	Remote Setpoint	-	Yes	1	AC
PXU41DCO	1/8 DIN	0 to 10 VDC	Relay	Remote Setpoint	-	Yes	1	DC
PXU11A50	1/4 DIN	Dual Relay Output	Relay	-	-	Yes	2	AC
PXU11AE0	1/4 DIN	Dual Relay Output	Relay	-	-	Yes	2	DC
PXU21BE0	1/4 DIN	Logic/Relay	Relay	CT Input	-	Yes	1	DC
PXU21DE0	1/4 DIN	Logic/Relay	Relay	Remote Setpoint	-	Yes	1	DC
PXU21CE0	1/4 DIN	Logic/Relay	Relay	-	Analog	Yes	1	DC
PXU31A50	1/4 DIN	4 to 20 mA	Relay	-	-	Yes	2	AC
PXU31AE0	1/4 DIN	4 to 20 mA	Relay	-	-	Yes	2	DC
PXU31BE0	1/4 DIN	4 to 20 mA	Relay	CT Input	-	Yes	1	DC
PXU31CE0	1/4 DIN	4 to 20 mA	Relay	-	Analog	Yes	1	DC
PXU31DE0	1/4 DIN	4 to 20 mA	Relay	Remote Setpoint	-	Yes	1	DC
PXU41A50	1/4 DIN	0 to 10 VDC	Relay	-	-	Yes	2	AC
PXU41AE0	1/4 DIN	0 to 10 VDC	Relay	-	-	Yes	2	DC
PXU41BE0	1/4 DIN	0 to 10 VDC	Relay	CT Input	-	Yes	1	DC
PXU41CE0	1/4 DIN	0 to 10 VDC	Relay	-	Analog	Yes	1	DC
PXU41DE0	1/4 DIN	0 to 10 VDC	Relay	Remote Setpoint	-	Yes	1	DC



PAX2C 1/8 DIN ADVANCED UNIVERSAL PID CONTROLLERS

- ▲ Universal process, thermocouple/RTD, voltage and current inputs
- ▲ Programmable dual-line display with units and bar graph
- ▲ Field-installable option cards: HCM, Second analog input/PID controller, 4-20 mA or 0-10 V analog output, relay or solid state outputs
- ▲ Optional communication cards include RS-232, RS-485/Modbus, DeviceNet and PROFIBUS-DP
- ▲ Ramp soak capability, 16 profiles with up to 20 step changes



Model Number	Function	Size	Display	Display Color	Analog Output	Alarms	Communication	Power
PX2CHZ00	Universal	1/8 DIN Horizontal	LCD	Tri-color Backlit	Yes	Up to 16	Yes	AC/DC
PX2CVR00	Universal	1/8 DIN Vertical	LCD	Tri-color Backlit	Yes	Up to 16	Yes	AC/DC



DLC DUAL LOOP DIN-RAIL PID CONTROLLERS

- ▲ Dual independent inputs
- ▲ Support for two alarms per channel
- ▲ Built-in MOSFETs capable of switching up to 1 Amp DC



Model Number	Function	Universal Input(s)	Dual Analog Outputs
DLC00001	Dual Loop Controller	Yes	-
DLC01001	Dual Loop Controller	Yes	Yes
DLC11001	Dual Setpoint Controller	Yes	Yes

RTUS & I/O MODULES

Red Lion's Sixnet series of RTUs & I/O Modules provide reliable, simple and secure remote monitoring for sites located in harsh environments. Offering the lowest cost per I/O point and rugged environmental ratings, these solutions provide robust sensor or field data collection and communication.

- ▲ Built-in Ethernet connectivity
- ▲ UL Class I, Division 2 Listed; ABS, CE, ATEX and CSA certified
- ▲ Easily scalable to fit any application

INDUSTRIAL RTUS

- ▲ Data logging
- ▲ Programmed via IEC61131
- ▲ Non-proprietary Linux® OS supports custom programming
- ▲ Communicates with Modbus, Modbus TCP/UDP, and other Industrial protocols



Model Number	Ethernet Ports	RS-232 Ports	RS-485 Ports	DI	DO	AI	AO	NVRAM	Flash	DRAM	Operating Temp.
ST-IPM-8460	6	3	1	-	-	-	-	8M	512M	512M	-40° to 70°C
VT-MIPM-245-D	1	2	2	12	4	8	2	512K	64M	32M	-40° to 70°C
VT-MIPM-135-D	1	2	1	12	8	6	-	512K	64M	32M	-40° to 70°C
VT-IPM2M-213-D	1	1	1	12	4	8	2	512K	32M	32M	-40° to 70°C
VT-IPM2M-113-D	1	1	1	12	4	8	-	512K	32M	32M	-40° to 70°C
VT-UIPM-431-H	1	2	1	8	4	2	-	512K	16M	16M	-40° to 70°C

ETHERTRAK® INDUSTRIAL I/O MODULES

- ▲ Built-in security blocks unwanted access
- ▲ Powerful communications featuring configurable two port switch
- ▲ Support for Modbus/TCP, Sixnet UDR and other industrial protocols
- ▲ Pairs with RTUs for extended I/O



Model Number	Function	High-Speed Counter	DI	DO	AI	AO	PoE Capable	Operating Temp.
E2-MIX20884-D	32 Mixed Inputs/Outputs	4 (Isolated)	20**	8*	8	4	-	-40° to 75°C
E2-MIX24880-D	32 Mixed Inputs/Outputs	2 (One Isolated)	24**	8*	8	-	-	-40° to 75°C
E2-MIX24882-D	34 Mixed Inputs/Outputs	1	24**	8*	8	2	-	-40° to 75°C
E2-32DI24-D	32 24 V Digital Inputs	1 (Isolated)	32	-	-	-	-	-40° to 75°C
E2-16DI24-D	16 Isolated 24 V Digital Inputs	2	16	-	-	-	-	-40° to 75°C
E2-16DIAC-D	16 Isolated 120 VAC Digital Inputs	-	16	-	-	-	-	-40° to 75°C
E2-32DO24-D	32 24 V Digital Outputs	-	-	32	-	-	-	-40° to 75°C
E2-16DO24-D	16 24 V Digital Outputs	-	-	16	-	-	-	-40° to 75°C
E2-16DORLY-D	16 Digital Output Relays (Form A and Form C)	-	-	16	-	-	-	-40° to 75°C
E2-16ISO20M-D	16 Isolated Analog Inputs (4-20 mA)	-	-	-	16	-	-	-40° to 75°C
E2-32AI20M-D	32 Analog Inputs (4-20 mA)	-	-	-	32	-	-	-40° to 75°C
E2-32AI10V-D	32 Analog Inputs (0-10 VDC)	-	-	-	32	-	-	-40° to 75°C
E2-16AI20M-D	16 Analog Inputs (4-20 mA)	-	-	-	16	-	-	-40° to 75°C
E2-16AI-8AO-D	16 Analog Inputs / Analog Outputs (4-20 mA)	-	-	-	16	8	-	-40° to 75°C
E2-8AO20M-D	8 Analog Outputs	-	-	-	-	8	-	-40° to 75°C
E2-16ISOTC-D	16 Isolated Thermocouple Inputs (4-20 mA)	-	-	-	16TC	-	-	-40° to 75°C
E2-10RTD-D	10 RTD Inputs	-	-	-	10 RTD	-	-	-40° to 75°C

* Configurable as DI or DO.

** Last 8 are configurable as DI or DO.

SIGNAL CONDITIONERS

Red Lion provides a broad selection of signal conditioners for frequency, temperature and process applications. Our signal conditioners range from dedicated to universal models capable of accepting over 100 inputs, which enable these units to be used almost anywhere.

- ▲ Support for over 100 input/output combinations
- ▲ Plug-and-play deployment
- ▲ Offers frequency, process and temperature conversion

IFMA FREQUENCY TO ANALOG CONVERTERS

- ▲ Accepts frequency input and outputs analog voltage/current
- ▲ Rotary switch configuration
- ▲ Support for three-way isolation

Model Number	Function
IFMA0035	Frequency to Analog Converter DC Powered
IFMA0065	Frequency to Analog Converter AC Powered



IFMA SPEED SWITCHES

- ▲ Accepts frequency input and outputs over/under/zero speed detection
- ▲ Built-in single relay output
- ▲ Support for alarm latching and resetting

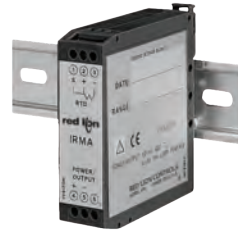
Model Number	Function
IFMR0036	Speed Switch DC Powered
IFMR0066	Speed Switch AC Powered



CE

IRMA RTD TO ANALOG CONVERTERS

- ▲ Accepts two, three or four wire RTD input, outputs 4 to 20 mA
- ▲ Loop powered models
- ▲ Sensor breakdown detection



Model Number	Function
IRMA2003	Intelligent RTD Module with Analog Output Loop Powered
IAMA0001	Intelligent RTD Module with Analog Output DC Powered

CE

ITMA THERMOCOUPLE TO ANALOG CONVERTERS

- ▲ Accepts thermocouple or millivolt input, outputs 4 to 20 mA
- ▲ Ten-position DIP switch for configuration
- ▲ Thermocouple breakdown detection



Model Number	Function
ITMA2003	Intelligent Thermocouple with Analog Output Loop Powered
IAMA0001	Intelligent Thermocouple with Analog Output DC Powered

UL CE FM

IAMS UNIVERSAL SIGNAL CONDITIONERS

- ▲ Universal power and input
- ▲ Three-way signal isolation
- ▲ Easy programming with removable configuration display module



Model Number	Function
IAMS0002	IAMS with Analog Output
IAMS0020	IAMS with Dual Setpoint
IAMS0022*	IAMS with Analog and Dual Setpoint
PGMMOD00**	Programming Display Module

* Not CE approved.

** Not CE approved or UL Listed



IAMA UNIVERSAL SIGNAL CONDITIONER

- ▲ Features over 100 analog I/O combinations
- ▲ Provides linear or square root extraction
- ▲ Three-way signal isolation

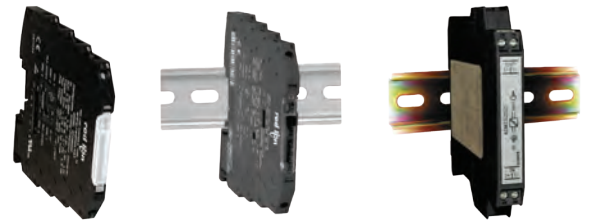


Model Number	Function
IAMA0001	Linear Universal Signal Conditioning Module



IAMA0006, AIMI & AFCM SLIMLINE SIGNAL CONVERTERS

- ▲ Small form factor signal conditioner
- ▲ Converts process input signals
- ▲ Ultra-slim design
- ▲ Loop powered models



Model Number	Function
IAMA0006	Universal with 35 Input/Output Conversions
AIMI0202*	4 to 20 mA Loop Powered Isolator
AFCM0000	Voltage/Current to Frequency Conversion DC Powered

* Not UL Recognized.



WATCHDOG RELAY HARDWARE MONITOR

- ▲ Rugged hardware-based solution
- ▲ Heartbeat monitoring for PLCs, RTUs and controllers
- ▲ Automatically powers down systems when malfunction is detected
- ▲ UL Class 1, Division 2 Listed for hazardous locations



Model Number	Function
6HBWDOG1	Heartbeat Watchdog with Form C Relay

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)



FM

FM Approvals is an international leader in third-party certification and approval of commercial and industrial products. (FM Global, www.fmglobal.com, 2015)



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)

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EXCELLENCE. REDEFINED.

Red Lion has been delivering innovative solutions to global markets since 1972 through communication, monitoring and control for industrial automation and networking - enabling companies worldwide to gain real-time data visibility that drives productivity. Red Lion is part of Spectris plc, the productivity enhancing instrumentation and controls company. For more information, please visit <http://www.redlion.net>

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