



Access Product Guide

Data Acquisition | PID Controllers RTUs & I/O Modules
Signal Conditioners





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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Data Acquisition

With support for more than 300 industrial protocols, Red Lion helps devices from different manufacturers communicate. Our Crimson configuration 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

Field upgradeable software lets users unlock additional functionality from protocol conversion to IIoT connectivity on existing hardware. Upgrading your application from a gateway to a controller has never been easier! FlexEdge is the ultimate Edge device.”



	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-I0UIN6-I0-000	FlexEdge 6 Universal Inputs Module	6				
	DA-M00-I0OUT8-I0-000	FlexEdge 8 Analog Outputs Module			8		
	DA-M00-I0DIOR-00-000	FlexEdge 8 Digital Inputs, 8 Relay Outputs Module		8			8
	DA-M00-I0-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-I0-8R00-00-000	FlexEdge 8 Relay Outputs Module					8 Form-C
	DA-M00-I0-IN4D-A0-000	FlexEdge 4UI Mixed I/O Module	4	3*	2	3*	
	DA-M00-I0-IN2D-A0-000	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
DA10DOC000000000	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



- 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.

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

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.



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	PXU
DIN Size(s)	1/16, 1/8, 1/4
Mounting	Panel
Display	Dual-Line
Bar Graph on Display	
PID Control Zones	1
Universal Inputs	•
Alarms	•
Protocol Conversion	
Built-in Communication	Optional
Expansion Card Slots	
Power Input	AC or 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
PXU11BC0	1/8 DIN	Dual Relay Output	Relay	CT Input	-	Yes	1	DC
PXU11C30	1/8 DIN	Dual Relay Output	Relay	-	Analog	Yes	1	AC
PXU11CC0	1/8 DIN	Dual Relay Output	Relay	-	Analog	Yes	1	DC
PXU11D30	1/8 DIN	Dual Relay Output	Relay	Remote Setpoint	-	Yes	1	AC
PXU11DC0	1/8 DIN	Dual Relay Output	Relay	Remote Setpoint	-	Yes	1	DC
PXU20030	1/8 DIN	Solid State Output	-	-	-	-	-	AC
PXU200C0	1/8 DIN	Solid State Output	-	-	-	-	-	AC
PXU21A30	1/8 DIN	Logic/Relay	Relay	-	-	Yes	2	AC
PXU21AC0	1/8 DIN	Logic/Relay	Relay	-	-	Yes	2	DC
PXU21B30	1/8 DIN	Logic/Relay	Relay	CT Input	-	Yes	1	AC
PXU21BC0	1/8 DIN	Logic/Relay	Relay	CT Input	-	Yes	1	DC
PXU21C30	1/8 DIN	Logic/Relay	Relay	-	Analog	Yes	1	AC
PXU21CC0	1/8 DIN	Logic/Relay	Relay	-	Analog	Yes	1	DC
PXU21D30	1/8 DIN	Logic/Relay	Relay	Remote Setpoint	-	Yes	1	AC
PXU21DC0	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
PXU31AC0	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
PXU31BC0	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
PXU31CC0	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
PXU31DC0	1/8 DIN	4 to 20 mA	Relay	Remote Setpoint	-	Yes	1	DC
PXU40030	1/8 DIN	0 to 10 VDC	-	-	-	-	-	AC
PXU400C0	1/8 DIN	0 to 10 VDC	-	-	-	-	-	DC
PXU41B30	1/8 DIN	0 to 10 VDC	Relay	CT Input	-	Yes	1	AC
PXU41BC0	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
PXU41CC0	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
PXU41DC0	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



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-138-D	1	1	1	12	8	6	-	8M	512M	512M	-40° to 70°C
VT-mIPm-248-D	1	2	2	12	4	8	2	8M	512M	512M	-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
- Can be used independently with other PLCs or RTUs.



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.

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
E3-16AIBAO-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.



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

IFM0001 UNIVERSAL FREQUENCY TO ANALOG CONVERTER/SPEED SWITCH

The Model IFM0001 accepts a frequency input, and outputs an analog voltage or current or relay in proportion to the input frequency.

- Accepts frequency input and outputs analog voltage/current
- Rotary switch configuration
- Support for three-way isolation
- Accepts frequency input and outputs over/under/zero speed detection
- Built-in single relay output
- Support for alarm latching and resetting

UL CE



Model Number	Function
IFM0001	Frequency to Analog Converter DC Powered
IFM0001	Frequency to Analog Converter AC Powered
IFM0001	Speed Switch DC Powered
IFM0001	Speed Switch AC Powered

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
IRMA0001	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
ITMA0001	Intelligent Thermocouple with Analog Output Loop Powered
ITMA0001	Intelligent Thermocouple with Analog Output DC Powered

CE



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
PGMMOD05	Programming Display Module

UL CE FM



IAMA UNIVERSAL SIGNAL CONDITIONER

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

UL CE

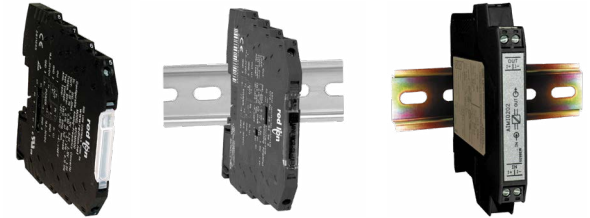


Model Number	Function
IAMA0001	Linear Universal Signal Conditioning Module

IAMA0006, AIMI & AFCM SLIMLINE SIGNAL CONVERTERS

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

UL CE



Model Number	Function
IAMA0006	Universal with 35 Input/Output Conversions
AIMI0202UL	4 to 20 mA Loop Powered Isolator
AFCM0000	Voltage/Current to Frequency Conversion DC Powered
ICS0000	Function Isolator/Signal Splitter

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

UL CE ABS



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)

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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