

# DA70A

3-Sled Modular IIoT  
Gateway with Scalable I/O



## ▲ FLEXEDGE™ Intelligent Edge Automation Platform

RED LION'S DA70A IS AN ALL-IN-ONE INDUSTRIAL DATA ACQUISITION AND EDGE PROCESSING GATEWAY THAT SIMPLIFIES THE MONITORING AND MANAGEMENT OF CONNECTED ASSETS AND PROCESSES

- ▲ Modular architecture to easily add cellular, Wi-Fi, serial, or USB connectivity
- ▲ Easily add up to 10 I/O modules including: analog I/O, digital I/O, universal input, relays and PID control
- ▲ Powerful networking at the core including: routing, NAT, VPN and stateful firewall
- ▲ Gateways can be upgraded to support protocol conversion, advanced automation features and Crimson Control (IEC 61131-3)
- ▲ Supports up to 10 simultaneous protocol conversions between over 300 industrial drivers (optional)
- ▲ Real-time logging to microSD card, USB drive, or FTP (optional)
- ▲ Industrial construction for reliable operation with intuitive LED status ring



## ▲ Ordering Guide

### MAIN UNIT

MODEL NUMBER	DESCRIPTION	SW GROUP
DA70A0FNNNNNN010	3-Sled 2 RS232 ports and 1 RS485 port Networking Gateway	Group 1
DA70A0FNNNNNN020	3-Sled 2 RS232 ports and 1 RS485 port Protocol Gateway	Group 2
DA70A0FNNNNNN030	3-Sled 2 RS232 ports and 1 RS485 port Adv IIoT Gateway	Group 3
DA70A0FNNNNNN040	3-Sled 2 RS232 ports and 1 RS485 port Adv Automation Controller	Group 4
DA70A0GNNNNNN010	3-Sled 1 RS232 port and 2 RS485 ports Networking Gateway	Group 1
DA70A0GNNNNNN020	3-Sled 1 RS232 port and 2 RS485 ports Protocol Gateway	Group 2
DA70A0GNNNNNN030	3-Sled 1 RS232 port and 2 RS485 ports Adv IIoT Gateway	Group 3
DA70A0GNNNNNN040	3-Sled 1 RS232 port and 2 RS485 ports Adv Automation Controller	Group 4

### ACCESSORIES

MODEL NUMBER	DESCRIPTION
DAS00CL9C4SAM000	4G LTE (CAT4) Cellular Sled for AMER (AT&T, Generic)
DAS00CL9C1SAZ000	4G LTE (CAT1) Cellular Sled for AUS (Telstra)
DAS00CL9C4SVZ000	4G LTE (CAT4) Cellular Sled for AMER (Verizon)
DAS00CL9C4SEU000	4G LTE (CAT4) Cellular Sled for EMEA, SAARC, APAC
DAS00WF10N0AM000	802.11n Wi-Fi Sled
DAS00PN40U400000	1 Port USB 2.0 Host Sled
DAS00PN2221IS000	Dual RS232 Ports Sled (Isolated)
DAS00PN2442IS000	Dual RS485 Ports Sled (Isolated)
DAS00PN2245IS000	Mixed RS232/RS485 Ports Sled (Isolated)
DAM00IQUIN6I0000	6 Isolated Universal Analog Inputs
DAM00I00UT8I0000	8 Analog Outputs
DAM00I0IOR00000	8 Digital Inputs, 8 Digital Relay Outputs
DAM00I0DIO000000	8 Digital Inputs, 8 Digital Outputs
DAM00PDP1RA00000	Single PID, Relay and Analog Outputs
DAM00PDP1SA00000	Single PID, SSR and Analog Outputs
DAM00PDP2R000000	Dual PID, Relay Outputs
DAM00PDP2S000000	Dual PID, SSR Outputs
DAM00PDP2SM00000	Dual PID, SSR Outputs, and Heater Current Monitor

See software manual for details on sled operation.

# DA70A Ordering Guide Cont. and Specifications

## SOFTWARE GROUPS

	GROUP 1 NETWORKING	GROUP 2 PROTOCOL	GROUP 3 ADV IIOT	GROUP 4 CONTROLLER
<b>CONFIGURATION</b>				
Web GUI	Y	Y	Y	Y
Crimson	Y	Y	Y	Y
<b>NETWORKING</b>				
Firewall	Y	Y	Y	Y
RADIUS Auth.	Y	Y	Y	Y
Routing	Y	Y	Y	Y
NAT	Y	Y	Y	Y
IP Fallback	Y	Y	Y	Y
VPN Client/Server	Y	Y	Y	Y
<b>AUTOMATION</b>				
300+ Drivers		Y	Y	Y
IIoT Connectors		Y	Y	Y
OPC UA		Y	Y	Y
SQL Sync			Y	Y
Data Logging			Y	Y
Virtual HMI			Y	Y
Advanced Web Server			Y	Y
<b>IEC CONTROL</b>				
Crimson Control				Y

## Specifications

### Power Requirements

Supply Voltage: 12-24 VDC +/-15%, Class 2 source

INPUT VOLTAGE	12 V	24 V
Typ. Power DA70A Only	4 W	4.5 W
Max Power DA70A Only	4.5 W	5 W
Available Power for Modules (Maximum of 10 modules)	43 W	45 W
Max Power DA70A, with Sleds & USB	16 W	17 W
Max Power DA70A with full accessories	59 W	62 W

### Battery

3 V Lithium coin cell.

### Memory

On Board User Memory: 1 GB of non-volatile Flash memory.  
Memory Card: microSD slot accepts Class 5 or better microSD cards up to 256 GB capacity. FAT32, industrial grade.

### Communication Properties

USB Device Port: One (1) Isolated USB Type B Port Complies with USB Specification 2.0 (Full Speed)

USB Host Port: One (1) USB Type A Port Complies with USB Specification 2.0 (Full Speed)

Hardware overcurrent protected (0.5 A max per port)

Ethernet Ports: Two (2) 10BaseT / 100BaseTX RJ45 ports (1500 Vrms Network Isolation)

Serial Ports: Three (3) Serial Ports with Individual Port Isolation available in these two configurations:

DA70A0F	2 - RS-232 ports (RJ12 connectors) 1 - RS-485/422 port (RJ45 connector)
DA70A0G	1 - RS-232 port (RJ12 connector) 2 - RS-485/422 ports (RJ45 connectors)

### Environmental

Operating Temperature: -40 to 75 °C

Storage Temperature: -40 to 85 °C

Operating and Storage Humidity: 0 to 85% max. RH noncondensing

## ▲ DA70A Specifications Cont. and Dimensions

Vibration to IEC 60068-2-6: Operational 5-500 Hz, 2 g  
Shock to IEC 60068-2-27: Operational 15 g  
Altitude: Up to 2000 meters  
Installation Category II, Pollution Degree 2 as defined in IEC/EN 60664-1.

### Certification & Compliance

CE Approved  
EN 61326-1 Immunity to Industrial Locations  
Emission CISPR 11 Class A  
IEC/EN 61010-1  
RoHS Compliant  
ATEX Approved  
Ⓜ II 3 G Ex ec IIC T4 Gc  
DEMKO 20 ATEX 2268X  
IECEX Approved  
IECEX UL 20.0007X  
UL Hazardous: File # E317425  
Rugged IP30 enclosure

### Connections

Wire Strip Length: 0.3" (7.5 mm)  
Wire Gauge Capacity: 12 to 24 AWG (3.31 to 0.20 mm<sup>2</sup>) copper wire only

### Construction

Metal and plastic enclosure with IP30 rating.  
Weight: 2 lb 2.5 oz (978.05 g)

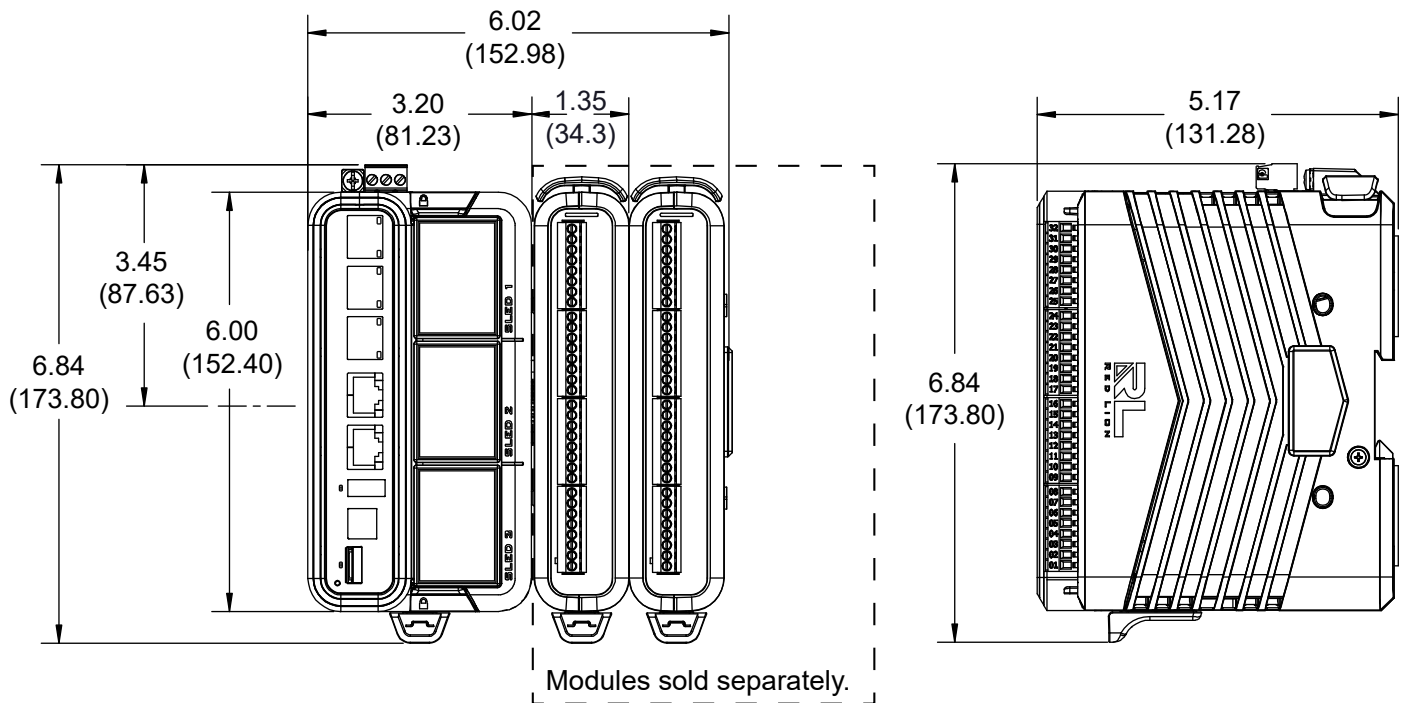
### Mounting

DIN Rail: Attaches to standard "T" profile DIN rail according to EN50022 - 35 x 7.5 and 35 x 15

### Warranty

3 years on design and manufacturing defects.  
Specifications are subject to change.  
Visit [www.redlion.net](http://www.redlion.net) for more information.

## ▲ Dimensions in inches (mm)





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.

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