

# FLEXEDGE™

## I/O MODULES



### ▲ FLEXEDGE™ Intelligent Edge Automation Platform

#### MASSIVELY SCALABLE. EFFORTLESSLY DEPLOYABLE.

Easily add modules to a FlexEdge DA70 controller to monitor and control any application. With modules available in variety of data acquisition and PID control configurations, the FlexEdge Intelligent Edge Automation Platform provides a scalable solution to integrate complex multi-vendor environments into digital transformation strategies, while providing a futureproof solution for changing application needs.

#### APPLICATIONS

- ▲ Factory Automation
- ▲ Oil & Gas
- ▲ Power & Utilities
- ▲ Water/Wastewater
- ▲ Maritime
- ▲ Industrial Internet of Things (IIoT)

#### PRODUCT HIGHLIGHTS

- ▲ Field Installable
- ▲ Industrial Rated for Hazardous Locations
- ▲ Wide Operating Temperature Range
- ▲ Zero Config Hot-Swap Replacement
- ▲ UL Class 1, Division 2 and ATEX/IECEX Certifications

#### FEATURES & BENEFITS

##### REDUCED DOWNTIME

- ▲ On-device wiring diagrams and removable wire clamp screw terminal blocks ease installation
- ▲ Hot-swappable I/O module's configuration is restored by the controller upon reconnect, eliminating reprogramming on replacement
- ▲ At-a-glance module status indicator and individual channel LEDs accelerate troubleshooting and system testing

##### BUILT FOR INDUSTRIAL APPLICATIONS

- ▲ With a wide operating temperature range, I/O modules are designed to thrive in harsh environments
- ▲ Model-specific certifications assure operation in potentially hazardous environments

## ▲ Universal Analog Input Module

The 6UIN I/O module features 6 Universal Analog Inputs operating at 16-bit resolution, which makes it an ideal choice for data acquisition applications. The module can accept a wide range of thermocouples and RTDs, as well as 0/4-20 mA and 0-10 V process signals. Each input has a dedicated alarm LED that indicates a variety of conditions.

### FEATURES

- ▲ Six (6) Universal Analog Inputs
- ▲ Universal Inputs Accept TC, RTD, 0-5 V, 0-10 V, 0-20 mA, 4-20 mA, 0-50 mV Signals
- ▲ Offers Complete Isolation; Inputs, Power, and Communication
- ▲ At-a-Glance Module Status Indicator
- ▲ Individual Channel LEDs for Troubleshooting and Testing
- ▲ Hot Swappable with Zero Configuration
- ▲ UL Class 1, Division II and ATEX/IECEX

### ORDERING GUIDE

Part Number	Description
DA-M00-I0UIN6-I0-000	6 Isolated Universal Analog Inputs



## ▲ Analog Output Module

The 8AO I/O module offers 8 analog outputs and is designed for use with DA70 controllers. The module provides eight isolated outputs that are independently programmable for output ranges of 0-5 V, 0-10 V, +/-10 V, 0-20 mA, or 4-20 mA. Internal scaling is provided to accommodate virtually any application.

### FEATURES

- ▲ Outputs include: 0-5 VDC, 0-10 VDC, ±10 VDC, and 0/4-20 mA DC
- ▲ Offers Complete Isolation; Inputs, Power, and Communication
- ▲ On-device Wiring Diagram
- ▲ At-a-Glance Module Status Indicator
- ▲ Outputs are Software Configured and Fully Scalable
- ▲ Individual Channel LEDs for Troubleshooting and Testing
- ▲ Hot Swappable with Zero Configuration
- ▲ UL Class 1, Division II and ATEX/IECEX

### ORDERING GUIDE

Part Number	Description
DA-M00-I0OUT8-I0-000	8 Analog Outputs



## ▲ Digital Input with Relay Output Module

The 8DI/8RO module is designed for use with the FlexEdge DA70 controller, and features 8 Digital Inputs and 8 Relay Outputs that can be used to monitor contact or sensor inputs and actuate relays, solenoids, PLC inputs, etc.

The Digital Inputs accept DC inputs or contact closures and are software configured for Sink or source signals. Each input also offers its own selectable input filter, as well as high or low-active input setting.

### FEATURES

- ▲ Eight (8) DC Voltage Inputs, Eight (8) Form A Relay Outputs
- ▲ Inputs Isolated from Outputs
- ▲ At-a-Glance Module Status Indicator
- ▲ On-device Wiring Diagram
- ▲ Hot Swappable with Zero Configuration
- ▲ UL Class 1, Division II Certification

### ORDERING GUIDE

Part Number	Description
DA-M00-IODIOR-00-000	8 Digital Inputs, 8 Digital Relay Outputs



## ▲ Digital Input with SSR Output Module

The 8DI/8DO module is designed for use with the FlexEdge DA70 controller, and features 8 Digital Inputs and 8 SSR Outputs. The module is an ideal choice for monitoring contact or sensor inputs and actuate relays, solenoids, PLC inputs, etc.

The Digital Inputs accept DC inputs or contact closures and are software configured for Sink or source signals. Each input also offers its own selectable input filter, as well as high or low-active input setting. The Digital Outputs are capable of switching up to one amp each.

### FEATURES

- ▲ 8 Digital Inputs and 8 SSR Outputs
- ▲ Inputs Feature Individual Sink/Source Configuration
- ▲ Outputs are Sinking with Max of 1A per Channel
- ▲ Offers Complete Isolation; Inputs, Outputs, Power, and Communication
- ▲ Hot Swappable with Zero Configuration
- ▲ UL Class 1, Division II and ATEX/IECEX

### ORDERING GUIDE

Part Number	Description
DA-M00-IO-DI00-00-000	8 Digital Inputs, 8 Digital Outputs



# ▲ PID Control Modules

The single (1PID) and dual (2PID) loop PID control modules are designed for use with the FlexEdge DA70 controller. The design of the system provides a true modular PID control platform for multi-zone control applications.

The modules can accept a wide range of inputs including:TC, RTD, 0-10 V, 0/4-20 mA. With multiple discrete outputs, plus an analog output (1PID only), the PID modules can perform virtually any combination of time proportioning or linear control for heat, cool, or heat/cool applications.

## FEATURES

- ▲ Dedicated Single or Dual loop PID modules
- ▲ Universal inputs accept TC, RTD, 0-10V and 0/4-20mA
- ▲ On-Demand Auto-Tuning of PID Settings
- ▲ DC Analog Output (1PID)
- ▲ Heater Current Input (optional on 2PID) Ensures Detection of Heater Circuit Failure
- ▲ Offers Complete Isolation; Inputs, Outputs, Power, and Communication
- ▲ Hot Swappable with Zero Configuration
- ▲ UL Class 1, Division II Certification and ATEX/IECEX\* (\*model specific)



## ORDERING GUIDE

Part Number	Description
DA-M00-PD-P1RA-00-000	Single PID, Relay and Analog Outputs
DA-M00-PD-P1SA-00-000	Single PID, SSR and Analog Outputs
DA-M00-PD-P2R0-00-000	Dual PID, Relay Outputs
DA-M00-PD-P2S0-00-000	Dual PID, SSR Outputs
DA-M00-PD-P2SM-00-000	Dual PID, SSR Outputs, and Heater Current Monitor

## CERTIFICATIONS & COMPLIANCES

\*Please refer to individual I/O Module installation guides for agency certifications.

CE Approved

EN 61326-1 Immunity to Industrial Locations

Emission CISPR 11 Class A

IEC/EN 61010-1

RoHS Compliant

## ENVIRONMENTAL

Operating Temperature Range: -40 to 75 °C

Storage Temperature Range: -40 to 80 °C

Vibration to IEC 60068-2-6: Operational 5-500 Hz, 2 g

Shock to IEC 60068-2-27: Operational 15 g

Operating and Storage Humidity: 0 to 95% max. RH noncondensing

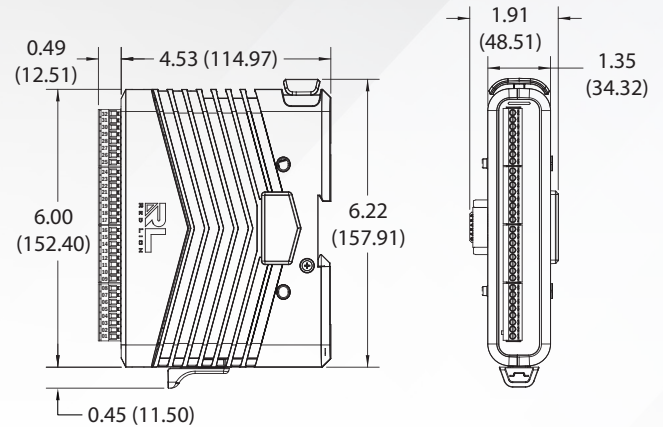
Altitude: Up to 2000 meters

## 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)



## ORDERING GUIDE

Type	Part Number	Description
Module	DA-M00-I0UIN6-I0-000	6 Isolated Universal Analog Inputs
Module	DA-M00-I0OUT8-I0-000	8 Analog Outputs
Module	DA-M00-I0DI0R-00-000	8 Digital Inputs, 8 Digital Relay Outputs
Module	DA-M00-I0-DI00-00-000	8 Digital Inputs, 8 Digital Outputs
Module	DA-M00-PD-P1RA-00-000	Single PID, Relay and Analog Outputs
Module	DA-M00-PD-P1SA-00-000	Single PID, SSR and Analog Outputs
Module	DA-M00-PD-P2R0-00-000	Dual PID, Relay Outputs
Module	DA-M00-PD-P2S0-00-000	Dual PID, SSR Outputs
Module	DA-M00-PD-P2SM-00-000	Dual PID, SSR Outputs, and Heater Current Monitor



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As global experts in communication, monitoring and control for industrial automation and networking, Red Lion has been delivering innovative solutions for over forty years. Our automation, Ethernet and cellular M2M technology enables companies worldwide to gain real-time data visibility that drives productivity. Product brands include Red Lion, N-Tron and Sixnet. With headquarters in York, Pennsylvania, the company has offices across the Americas, Asia-Pacific and Europe. Red Lion is part of Spectris plc, the productivity-enhancing instrumentation and controls company. For more information, please visit [www.redlion.net](http://www.redlion.net). ADLD0497 051120 © 2020 Red Lion Controls, Inc. All rights reserved. Red Lion, the Red Lion logo, N-Tron and Sixnet are registered trademarks of Red Lion Controls, Inc. All other company and product names are trademarks of their respective owners.

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