# DA70A 3-Sled Modular IIoT Gateway With Scalable Inputs/Outputs

## Installation Guide

- Protocol conversion feature converts numerous protocols simultaneously
- Modular design supports up to three communications sleds and up to 10 PID control or I/O modules
- Advanced web server with Javascript, Bootstrap, CSS and HTML5 support delivers operations visibility anywhere
- Real-time data, event and security logging to microSD card or via FTP with cryptographic signature support
- Industrial construction for reliable operation
- Wide operating temperature range
- HDMI™-enabled option (Group 3/4 only)

**UK CA**  **CE**  **Ex**

II 3 G Ex ec IIC T4 Gc
DEMKO 20 ATEX 2268X
IECEx UL 20.0007X
UL22UKEX2576X

**c UL us LISTED**
**IND.CONT. EQ.**
**E317425**

FOR USE IN HAZARDOUS LOCATIONS:
Class I, Division 2, Groups A, B, C, and D
T4

**HDMI™**
HIGH-DEFINITION MULTIMEDIA INTERFACE

**ABS TYPE APPROVED PRODUCT**

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## GENERAL DESCRIPTION

The modular 3-sled design of the DA70A allows for up to three communications sleds to be added as connectivity requirements change or new standards emerge. Rugged, field-installable PID control and I/O modules ensure a solution that adapts to meet almost any industrial application need, while the intuitive LED status ring makes diagnosing issues simple and straightforward.

Configured using Red Lion's Crimson® software or built-in web GUI, setup and configuration is seamless. The DA70A platform enables a unit to be upgraded from a powerful networking gateway with routing and VPN support to an advanced IIoT Automation Controller supporting 300+ industrial drivers and IEC-61131 control.

## GATEWAY PACKAGE CHECKLIST

This product package should contain the items listed below. This list does not include any sleds that may have been ordered. If any items are missing or damaged, contact Red Lion immediately.
- DIN Rail Mount DA70A Gateway
- Pre-installed Sled Carriage
- Dust Cover
- Installation Guide

## SAFETY SUMMARY

All safety related regulations, local codes as well as instructions that appear in this document or on equipment must be observed to ensure personal safety and to prevent damage to either the device or equipment connected to it.

Do not use these products to replace proper safety interlocking. No software-based device (or any other solid-state device) should ever be designed to be responsible for the maintenance of personnel safety or consequential equipment not equipped with safeguards. Red Lion disclaims any responsibility for damages, either direct or consequential, that result from the use of this equipment in a manner not consistent with these specifications.

> ⚠ WARNING - Explosion Hazard. Not hot swappable. do not remove or replace while circuit is live unless the area is free of ignitible concentrations.
>
> AVERTISSEMENT - Risque d'explosion. Non échangeable à chaud. ne pas retirer ou remplacer sous tension sauf si la zone est exempte de concentrations inflammables.

> ⚠ CAUTION: Risk of Danger
> Read complete instructions prior to installation and operation of the unit.
>
> ATTENTION : Risque de danger
> Lire les instructions complètes avant l'installation et l'utilisation de l'appareil.

> ⚠ WARNING - Explosion Hazard - Substitution of components may impair suitability for Class I, Division 2
>
> AVERTISSEMENT - Danger d'explosion - Le remplacement de composants peut nuire l'aptitude à la Classe I, Division 2

> ⚠ This equipment is suitable for use in Class I, Division 2, Groups A, B, C, D, or non-hazardous locations only.
>
> Cet équipement est adapté à une utilisation dans des endroits de classe I, Division 2, Groupes A, B, C, D, ou dans des endroits non dangereux seulement.

## SPECIFICATIONS

1. **POWER REQUIREMENTS**:
   The DA70A must use a Class 2 circuit according to National Electrical Code (NEC), NFPA-70 or Canadian Electrical Code (CEC), Part I, C22.1 or a Limited Power Supply (LPS) according to IEC 60950-1 or Limited-energy circuit according to IEC 61010-1.
   Power connection via removable three position terminal block.
   Supply Voltage: 12 to 24 VDC +/- 15%, Class 2 source

| INPUT VOLTAGE | 12 V | 24 V |
|---|---|---|
| Typical 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 |

2. **BATTERY**: 3 V Lithium coin cell. Typical lifetime of 5 years, at nominal usage. To maintain UL rating, replacement battery must be: Red Lion CRA000 BT3V0 00000, Rayovac BR1225X-BA or Panasonic BR1225A/BN.

3. **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.

4. **COMMUNICATION CAPABILITIES**:
   USB Device Port: Isolated USB 2.0 full speed, type B connection. USB DEVICE PORT IS FOR SYSTEM SET-UP AND DIAGNOSTICS AND IS NOT INTENDED FOR PERMANENT CONNECTION.
   USB Host Port: Complies with Universal Serial Bus Specification Rev 2.0. Supports data transfers at high speed and full speed with over current protection (0.5 A max).
   Ethernet Ports: Two 10BaseT/100BaseTX RJ-45 Ports, auto MDI/MDI-X.
   Isolation from Ethernet network to Gateway: 1500 Vrms
   Serial Ports: Three serial ports with individual port isolation available in these two configurations:

| DA70A*F | 2 - RS-232 ports (RJ12 connectors) 1 - RS-485/422 port (RJ45 connector) |
|---|---|
| DA70A*G | 1 - RS-232 port (RJ12 connector) 2 - RS-485/422 ports (RJ45 connectors) |

   HDMI Port: HDMI ™ Connector. Supports 1080p@24 Hz as specified in HDMI 1.4
   Not isolated from Host.

5. **ENVIRONMENTAL CONDITIONS**:
   Without HDMI:
   Operating Temperature Range: -40 to 75 °C $T_{AMB}$
   Storage Temperature Range: -40 to 85 °C $T_{AMB}$
   With HDMI Video:
   Operating Temperature Range: -20 to 75 °C $T_{AMB}$
   Storage Temperature Range: -20 to 85 °C $T_{AMB}$
   Operating and Storage Humidity: 0 to 85% max. RH non-condensing
   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.

6. **CERTIFICATIONS AND COMPLIANCES**:
   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
   UKEX Approved
   UL22UKEX2576X
   UL Hazardous: File # E317425
   Rugged IP30 enclosure
   **ABS Type Approval for Shipboard Applications**

7. **CONNECTIONS**:
   Power Connection: Three-pin top mounted connector
   Wire Strip Length: 0.3" (7.5 mm)
   Wire Gauge Capacity: 12 to 24 AWG (3.31 to 0.20 mm$^2$) copper wire only
   Torque: 4.4-5.3 inch-lbs (0.5-0.6 N-m)
   Module Connection: 8 pin connectors
   Wire Strip Length: 0.3" (7.5 mm)
   Wire Gauge Capacity: 14 to 24 AWG (2.08 to 0.20 mm$^2$) copper wire only
   Torque: 2 inch-lbs (0.23 N-m)

8. **CONSTRUCTION**: Metal and plastic enclosure with IP30 rating. For use only in an approved enclosure.

9. **MOUNTING REQUIREMENTS**: Mounts onto standard DIN style top hat (T) profile mounting rails according to EN50022 – 35 x 7.5 mm and 35 x 15 mm.
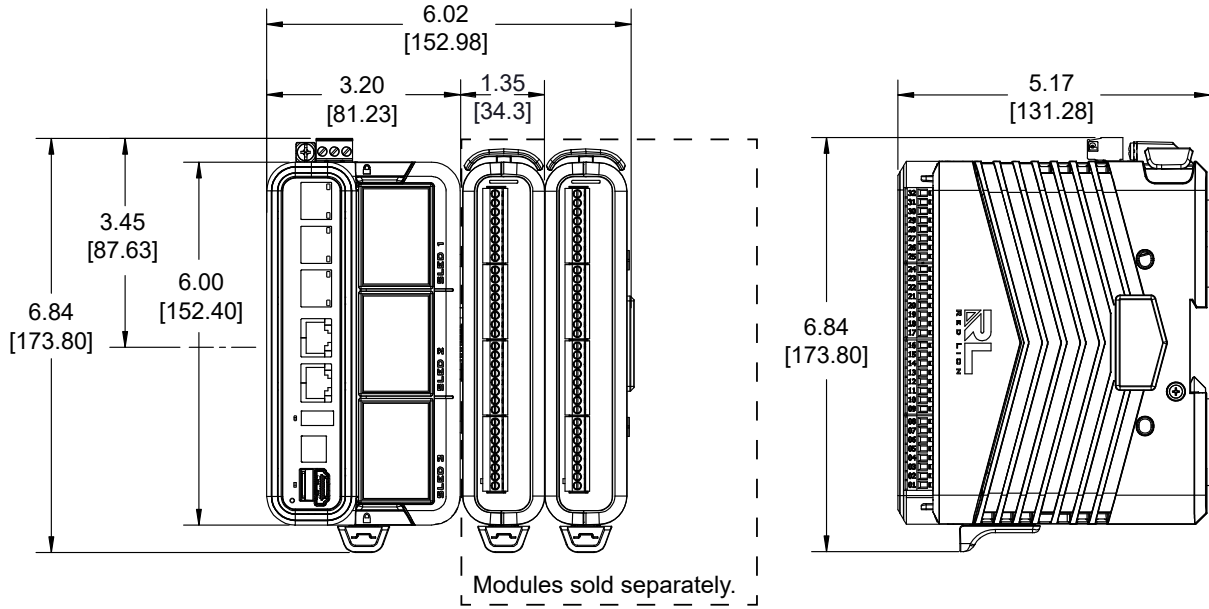
10. **WEIGHT**:
   Without HDMI Port: 2.156 lb (978.05 g)
   With HDMI Port: 2.279 lb (1.034 Kg)

## EMC INSTALLATION GUIDELINES

Visit https://www.redlion.net/emi for more information on EMI guidelines, Safety and CE issues as they relate to Red Lion products.
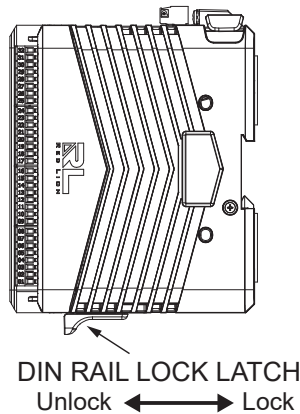
## DIMENSIONS In Inches [mm]



Modules sold separately.

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## INSTALLATION

### Gateway DIN Rail Mounting

The DIN rail should be mounted horizontally so that the unit's ventilation holes are vertical in relation to installation orientation. A minimum clearance of 1 inch (25.4 mm) should be maintained above and below the unit in order to ensure proper thermal regulation. A minimum 3.2 mm distance shall be maintained between the hazardous live parts of the equipment and accessible parts of the fire/electrical enclosure. For environments with vibration or impacts, DIN rail clamps are recommended.



DIN RAIL LOCK LATCH
Unlock ⟷ Lock

For hazardous location installation, the following shall be taken into consideration:
— The equipment shall only be used in an area of at least pollution degree 2, as defined in EN/IEC 60664-1.
— The equipment shall be installed in an enclosure that provides a minimum ingress protection of IP54 in accordance with EN/IEC 60079-0. The enclosure shall be accessible only with the use of a tool.
— Transient protection shall be provided that is set at a level not exceeding 140% of the peak rated voltage value at the supply terminals to the equipment.

**Recommended DIN Rail Mounting Steps:**

1. Ensure the DIN rail lock latch is in the outward most position (unlocked). Hook the top back of the DA70A DIN rail clip on the unit over the DIN rail.
2. Push the bottom of the unit towards the DIN rail until the unit is flush with the rail.
3. Push the DIN rail lock latch to the latched (in) position.

**Recommended DIN Rail Removal Steps:**

1. Move the DIN rail lock latch to the unlatched (out) position.
2. Unhook the top of the unit and remove it from the DIN rail.
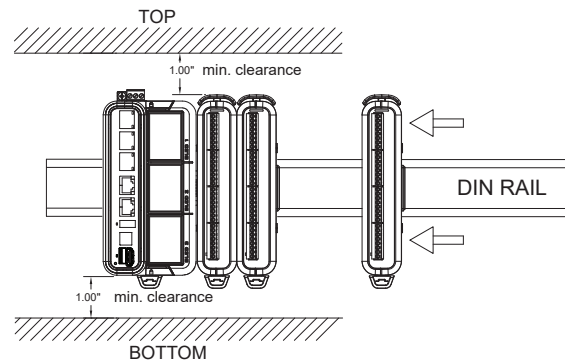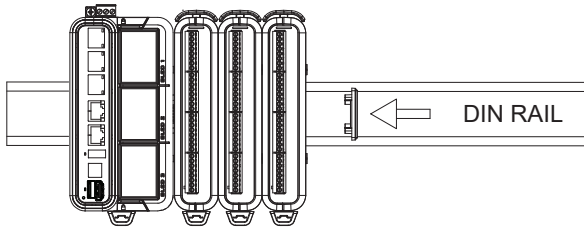
## MODULE INSTALLATION



Figure 1 - Attach modules to Gateway on DIN Rail

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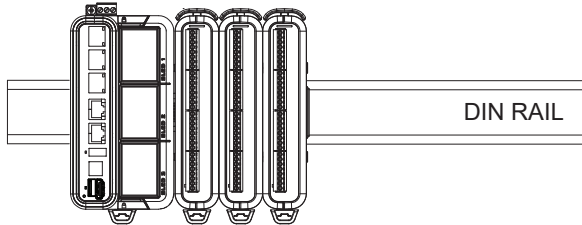Figure 2 - Attach dust cap to last module



Figure 3 - Module Installation is complete.

## SLED INSTALLATION

> ⚠ **CAUTION**: Follow standard ESD precautionary procedures.
>
> **ATTENTION**: Suivez les procédures de précaution standard de décharge électrostatique.

1. Prior to installing the Sled(s) for your DA70A Gateway application, ensure that the Gateway is not receiving power.
2. Remove the carriage from the Gateway case by releasing the two retaining latches and pulling straight out from Gateway.
3. Remove blank panel from the carriage slot of the target sled installation location.
4. Install sled by aligning the two sled mounting hole fasteners, with the Gateway mounting posts. Be sure locating holes on bottom side of sled align with the locating pins on the carriage, and the sled sits flush against the carriage.
5. Hand tighten the sled captive fasteners, or use a screwdriver if necessary.
6. Repeat the above steps for any additional sleds.
7. Carefully align the carriage with Gateway base and press carriage into the Gateway.

> ⚠ **CAUTION**: Failure to properly align the carriage can result in damage to the Sled connector pins.
>
> **ATTENTION:** Si le chariot n'est pas correctement aligné, les broches du connecteur du chariot risquent d'être endommagées.

8. Close the retaining latches to ensure the carriage is fully seated into the Gateway case.

## POWER SUPPLY REQUIREMENTS

The DA70A Gateway requires a 12-24 VDC power supply. Your unit may draw considerably less than the maximum rated power depending upon the configuration and features being used. As additional sleds and/or modules are used, your unit will draw increasing amounts of power. Items that could cause increases in current are modules, microSD card, communications sleds, and other features programmed through software.

To ensure you do not exceed the capacity of your DA70A Gateway host power supply, calculate the total power consumption required for all planned accessories. Each module's maximum power consumption is listed in the Specifications of their Product Bulletin. The total power available for modules is listed in the specifications of the DA70A Gateway host.

It is very important that the power supply meets the following requirements and is mounted correctly if the unit is to operate reliably. Please take care to observe the following points:
  – The power supply must be mounted close to the unit, with usually not more than 6 feet (1.8 m) of cable between the supply and the Gateway. Ideally, the shortest length possible should be used.
  – The wire used to connect the Gateway power supply should be at least 22-gauge wire. If a longer cable run is used, a heavier gauge wire should be used. The routing of the cable should be kept away from large capacitors, inverters, and other devices which may generate significant electrical noise.
  – Use a power supply with an NEC Class 2 or Limited Power Source (LPS) and SELV (safety extra-low voltage) rating. This type of power supply provides isolation to accessible circuits from hazardous voltage levels generated by a mains power supply due to single faults. Safety extra-low voltage circuits shall exhibit voltages safe to touch both under normal operating conditions and after a single fault, such as a breakdown of a layer of basic insulation or after the failure of a single component has occurred.
  – Peak efficiency (DA70A) occurs at the low side of the voltage range (approx. 12 V), recommended for high temperature applications.

Visit www.redlion.net for a complete list of our NEC Class 2 power supplies.

## WIRING

All power, input and output (I/O) wiring must be in accordance with Class I, Division 2 wiring methods and in accordance with the authority having jurisdiction.

> ⚠ CAUTION: Only UL listed wiring with temperature ratings greater than 90 °C permitted for Class I, Division 2, Zone 2 and ATEX, IECex and UKEX installations.
>
> ATTENTION: Seul le câblage homologué UL avec des températures nominales supérieures à 90°C est autorisé pour les installations de classe I, Division 2 , zone 2 et ATEX, IECex et UKEX.

## CONNECTING TO EARTH GROUND

Each DA70A has a chassis ground terminal on the top of the unit. Your unit should be connected to earth ground. Steps should be taken beyond connecting to earth ground to eliminate the buildup of electrostatic charges.
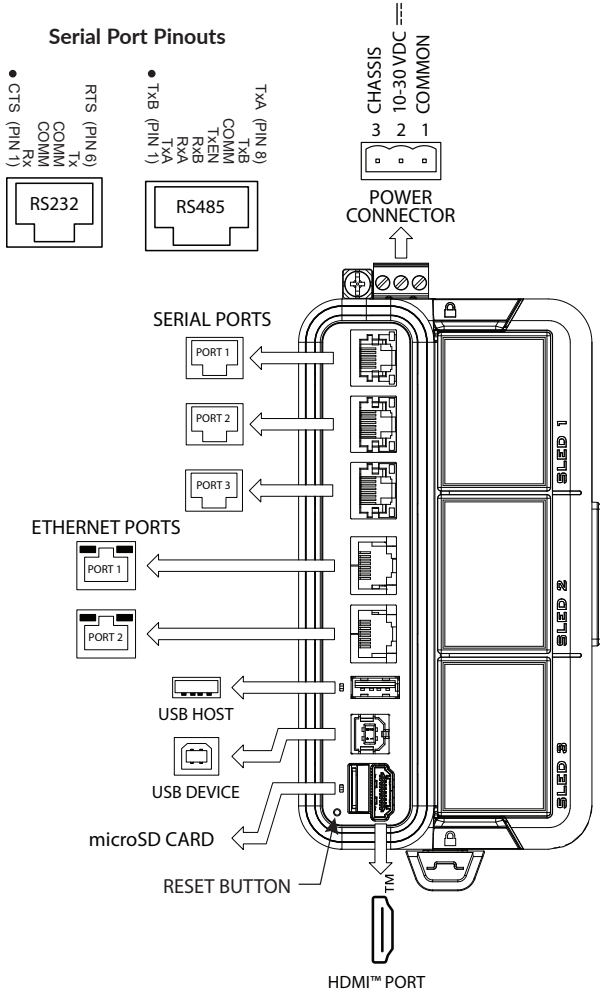
The chassis ground is not connected to signal common of the unit. Maintaining isolation between earth ground and signal common is not required to operate your unit. But, other equipment connected to this unit may require isolation between signal common and earth ground. To maintain isolation between signal common and earth ground care must be taken when connections are made to the unit. For example, a power supply with isolation between its signal common and earth ground must be used. Also, plugging in a USB cable may connect signal common and earth ground.[1]

[1] USB's shield may be connected to earth ground at the host. USB's shield in turn may also be connected to signal common.

## FACTORY RESET BUTTON

The factory reset button located in the lower left area of the front of the unit can be used to clear the configuration. Hold in the reset button at power up until the status ring LED turns bright white. Click the button to cycle through colors on the status ring LED. If left at white, the unit will boot its existing configuration, and if left at red it will clear the units memory. Once the memory is cleared, the user will need to use the default password printed on the unit to access the configuration.

## DA70A PORT PINOUTS

### Serial Port Pinouts

RS232

RS485

POWER CONNECTOR

SERIAL PORTS
- PORT 1
- PORT 2
- PORT 3

ETHERNET PORTS
- PORT 1
- PORT 2

USB HOST

USB DEVICE

microSD CARD

RESET BUTTON

HDMI™ PORT

SLED 1 / SLED 2 / SLED 3

## CONFIGURING A DA70A

The DA70A can be configured using Crimson® 3.2 software. Crimson is available as a no charge download from Red Lion's website. Crimson updates for new features and drivers are posted on the website as they become available. By configuring the DA70A using the latest Crimson version, you are assured that your unit has the most up to date feature set. Crimson software can configure the DA70A via a TCP/IP programming link, or via USB Serial Device port or TCP/IP interface (192.168.241.241) exposed when connected to the USB Device Port.

The microSD card can be used to program a DA70A by placing an image file on the microSD card. The card is then inserted into the target DA70A and powered. Refer to the Crimson 3.2 Software Guide for more information on the proper names and locations of this file.

## DA70A Web User Interface

1. Connect a PC to the DA70A Gateway using an Ethernet cable to Ethernet port 2 on the Gateway.
2. Set up the PC IP address by filling in the blank fields with the information below:

| Ethernet | Port |
|---|---|
| IP Address | 192.168.222.2 |
| Subnet Mask | 255.255.255.0 |
| Default Gateway | 192.168.222.1 |
| Preferred DNS | 192.168.222.1 |

3. Open a web browser and enter the following in the address bar:  https://192.168.222.222
4. To log in to the System webserver for the first time:
   User Name: admin
   Password: Refer to unique password located on unit.
   Note: For security, it is recommended to change the password according to your company's internal policy. To change the password, go to Administrator → Change Password.

## DA70A Cellular Connectivity

Cellular connectivity is achieved using the DA 4G LTE - CAT4/CAT1 Modem Sled. It is recommended that the Cellular Sled be installed into sled slot 1, the topmost sled slot in the carriage of the Gateway. Refer to the documentation shipped with your DA 4G LTE - CAT4/CAT1 Sled.

⚠ Do not connect or disconnect cables while power is applied unless area is known to be non-hazardous. Not hot swappable.

Ne pas brancher ou débrancher des câbles tandis que l'alimentation est appliquée, sauf si la zone est connue pour être non dangereuse. Pas échangeable à chaud.

## Ethernet Communications

Ethernet communications can be established at either 10Base T or 100Base TX. The DA70A's RJ45 jacks are wired as a NIC (Network Interface Card). For example, when wiring to a hub or switch use a straight-through cable, but when connecting to another NIC use a crossover cable. Refer to the Crimson 3.2 Software Guide and Red Lion's website for additional information on Ethernet communications.

| LED COLOR(S) | MEANING |
|---|---|
| YELLOW solid | Link established. |
| YELLOW flashing | Data being transferred. |
| GREEN (OFF) | 10 BASE-T Communications |
| GREEN (ON) | 100 BASE-TX Communications |

## RS232 PORT(S)

The DA70A has one or two RS232 serial ports (model dependent) that can be used for either programming or communications. The RS232 port can be used for master or slave protocols. The serial port has a pair of LEDs to indicate transmit and receive activity. The pinout is shown to the right.

| DA70A RS232 to a PC | | | |
|---|---|---|---|
| DA70A : RJ12 | | PC : DB9 | |
| Pin # | Name | Pin # | Name |
| 4 | COMM | 1 | DCD |
| 5 | Tx | 2 | Rx |
| 2 | Rx | 3 | Tx |
|  | N/C | 4 | DTR |
| 3 | COMM | 5 | GND |
|  | N/C | 6 | DSR |
| 1 | CTS | 7 | RTS |
| 6 | RTS | 8 | CTS |
|  | N/C | 9 | RI |

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## RS485/422 COMMS PORT(S)

The DA70A has one or two RS485 ports depending on unit configuration. These ports can be used for RS485 or RS422 communication. The comms port has a pair of LEDs to indicate transmit and receive activity.



| RS485/422 4-WIRE CONNECTIONS | RS485 2-WIRE CONNECTIONS |
|---|---|
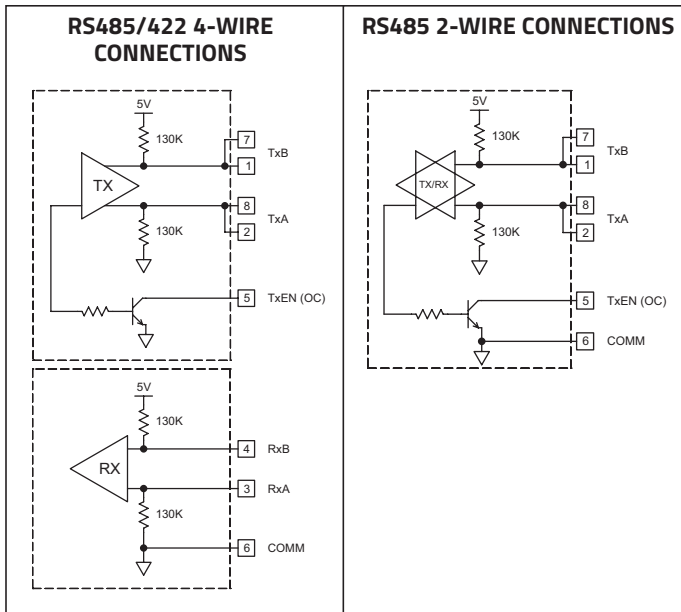
Note: All Red Lion devices connect A to A and B to B. Refer to www.redlion.net for additional information.

### Examples of RS485 2-Wire Connections

| DA70A to Red Lion RJ11 | | | |
|---|---|---|---|
| DA70A : RJ45 | | RLC : RJ11 | |
| Pin # | Name | Pin # | Name |
| 5 | TxEN | 2 | TxEN |
| 6 | COMM | 3 | COMM |
| 1 | TxB | 5 | B- |
| 2 | TxA | 4 | A+ |

| DA70A to Modular Controller | | | |
|---|---|---|---|
| DA70A | | Modular Controller | |
| Pin # | Name | Pin # | Name |
| 1, 4 | TxB | 1, 4 | TxB |
| 4, 1 | RxB | 4, 1 | RxB |
| 2, 3 | TxA | 2, 3 | TxA |
| 3, 2 | RxA | 3, 2 | RxA |
| 5 | TxEN | 5 | TxEN |
| 6 | COMM | 6 | COMM |
| 7 | TxB | 7 | TxB |
| 8 | TxA | 8 | TxA |

## DH485 COMMUNICATIONS

The DA70A's RS485/422 COMMS port can also be used for Allen Bradley DH485 communications.

WARNING: **DO NOT** use a standard DH485 cable to connect this port to Allen Bradley equipment. A cable and wiring diagram are available from Red Lion at www.redlion.net/cables-drivers.

## HDMI VIDEO

Supports 1080p@24Hz as specified in HDMI 1.4.
The following modes (Popular in TVs) are recommended:
- VGA 640x480/60Hz 4:3
- 720p 1280x720p/60Hz 16:9
- 720p 1280x720p/50Hz 16:9
- 1080p 1920x1080p/24hz 16:9

Additional modes are available in Crimson.
Refer to the Crimson 3.2 Software Guide. Note that some TVs may clip the edge of the picture. Refer to the TV documentation for information on how to turn off the overscan feature.

Audio is not supported. Color depth, 24bit RGB (16.7M).

## STATUS RING LED

| LED COLOR/STATE | MEANING |
|---|---|
| Pulsating white | PXE starting up |
| Steady dim white | PXE running with Crimson stopped |
| Steady pale green | PXE running with Crimson running |
| Steady pale red | Accepted alarms present |
| Pulsating red | Active Alarms present |
| Pulsating red and green | Identify command received |
| Flashing red and white | C3.2 crashed and restarting |

## INSTALL THE microSD CARD

Insert the microSD card into the slot on the front of the Controller with the card oriented as shown. The card is inserted properly when the card clicks into place in the card holder. To remove the microSD card, push in slightly on the card.
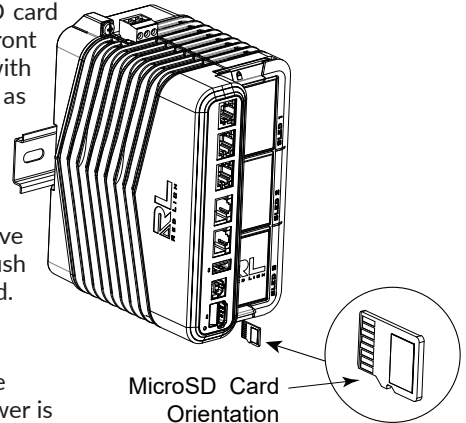


Note: Removal of the microSD while power is applied may result in corruption or loss of data.

MicroSD Card Orientation

## DA70A GATEWAY BATTERY & TIME KEEPING

⚠ **WARNING** - Explosion Hazard - The area must be known to be non-hazardous before servicing/ replacing the unit and before installing or removing I/O wiring and battery. Not hot swappable.

**AVERTISSEMENT** - Risque d'explosion - La zone doit être considérée comme non dangereuse avant de procéder à l'entretien ou au remplacement de l'appareil et avant d'installer ou de retirer le câblage E/S et la batterie. Pas échangeable à chaud.

A battery is used to keep time when the unit is without power. The battery of a DA70A Gateway unit does not affect the unit's memory, all configurations and data is stored in non-volatile memory.

### Changing the Battery

To change the battery of a DA70A Gateway, first remove power to the unit. Insert a small screwdriver into the slot provided on the battery holder and pry the battery holder out of the unit. Remove the old battery from the holder and replace it with a new battery.
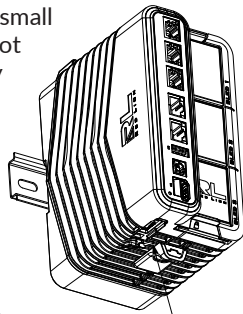
**To maintain UL rating, battery must be replaced with one listed in the Specifications.**

**Note: Battery orientation MUST MATCH as shown.**

− +
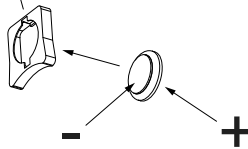
⚠ **CAUTION**: Lithium battery. Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer.

**ATTENTION**: Pile au lithium. Danger d'explosion si la batterie est mal remplacée. Remplacez-la uniquement par une pile du même type ou d'un type équivalent recommandé par le fabricant.

⚠ Please note that the old battery must be disposed of in a manner that complies with your local waste regulations. The battery must not be disposed of in fire, or in a manner whereby it may be damaged and its contents could come into contact with human skin.

Veuillez noter que la vieille pile doit être éliminée conformément à la réglementation locale en matière de déchets. La pile ne doit pas être jetée au feu, ni d'une manière qui pourrait l'endommager et son contenu pourrait entrer en contact avec la peau humaine.

## ORDERING INFORMATION

| SOFTWARE GROUPS | | | | |
|---|---|---|---|---|
| | Group 1 Networking | Group 2 Protocol | Group 3 IIoT | Group 4 Controller |
| **Configuration** | | | | |
| Web GUI | Y | Y | Y | Y |
| Crimson | Y | Y | Y | Y |
| **Networking** | | | | |
| 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 |
| **Automation** | | | | |
| 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 |
| **IEC Control** | | | | |
| Crimson Control | | | | Y |

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## Main Unit

| PART NUMBER | SW GROUP | DESCRIPTION |
|---|---|---|
| DA70A0FNNNNNN010 | Group 1 | 3-Sled 2 RS232 ports and 1 RS485 port Networking Gateway |
| DA70A0FNNNNNN020 | Group 2 | 3-Sled 2 RS232 ports and 1 RS485 port Protocol Gateway |
| DA70A0FNNNNNN030 | Group 3 | 3-Sled 2 RS232 ports and 1 RS485 port Adv IIoT Gateway |
| DA70A0FNNNNNN040 | Group 4 | 3-Sled 2 RS232 ports and 1 RS485 port Adv Automation Controller |
| DA70A0GNNNNNN010 | Group 1 | 3-Sled 1 RS232 port and 2 RS485 ports Networking Gateway |
| DA70A0GNNNNNN020 | Group 2 | 3-Sled 1 RS232 port and 2 RS485 ports Protocol Gateway |
| DA70A0GNNNNNN030 | Group 3 | 3-Sled 1 RS232 port and 2 RS485 ports Adv IIoT Gateway |
| DA70A0GNNNNNN040 | Group 4 | 3-Sled 1 RS232 port and 2 RS485 ports Adv Automation Controller |
| DA70A1FNNNNNN030 | Group 3 | 3-Sled 2 RS232 ports and 1 RS485 port Adv IIoT Gateway With HDMI |
| DA70A1FNNNNNN040 | Group 4 | 3-Sled 2 RS232 ports and 1 RS485 port Adv Automation Controller With HDMI |
| DA70A1GNNNNNN030 | Group 3 | 3-Sled 1 RS232 port and 2 RS485 ports Adv IIoT Gateway With HDMI |
| DA70A1GNNNNNN040 | Group 4 | 3-Sled 1 RS232 port and 2 RS485 ports Adv Automation Controller With HDMI |

## Accessories

| PART NUMBER | DESCRIPTION |
|---|---|
| DAS00CL9C1SAZ000 | 4G LTE (CAT1) Cellular Sled for AUS (Telstra) |
| DAS00CL9C4SAM000 | 4G LTE (CAT4) Cellular Sled for AMER (AT&T, Generic) |
| DAS00CL9C4SEU000 | 4G LTE (CAT4) Cellular Sled for EMEA, SAARC, APAC |
| DAS00CL9C4SVZ000 | 4G LTE (CAT4) Cellular Sled for AMER (Verizon) |
| DAS00PN1EE200000 | Dual Ethernet Sled |
| DAS00PN2221IS000 | Dual RS232 Ports Sled (Isolated) |
| DAS00PN2442IS000 | Dual RS485 Ports Sled (Isolated) |
| DAS00PN2245IS000 | Mixed RS232/RS485 Ports Sled (Isolated) |
| DAS00PN40U400000 | 1 Port USB 2.0 Host Sled |
| DAS00PN8CA6IS000 | DA Series, CAN Protocol Interface Sled |
| DAS00PN8J16IS000 | DA Series, J1939 Protocol Interface Sled |
| DAS00WF10N0AM000 | 802.11n Wi-Fi Sled |

A listing of the entire family of products and accessories can be found at www.redlion.net.

## RED LION CONTROLS TECHNICAL SUPPORT

If for any reason you have trouble operating, connecting, or simply have questions concerning your new product, contact Red Lion's technical support.

Support: support.redlion.net
Website: www.redlion.net
Inside US: +1 (877) 432-9908
Outside US: +1 (717) 767-6511

Corporate Headquarters
Red Lion Controls, Inc.
1750 5th Avenue York, PA 17403

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