# SI-RFA-DM Diagnostic Module Product Manual

Original Instructions
p/n: 209882 Rev. D
05-Jun-26
© Banner Engineering Corp. All rights reserved. www.bannerengineering.com

ПРОМЭЛЕКТРОНИКА/ sales@prom-elec.com

# Contents

**Chapter 1 Product Description ..... 3**
1.1 Models ..... 3
1.2 Important... Read this before proceeding! ..... 4
1.3 Overview ..... 4

**Chapter 2 Specifications ..... 6**
2.1 SI-RFA-DM1 Diagnostic Module ..... 6
2.2 SI-RFA-DM2 Diagnostic Module ..... 6
2.3 Dimensions ..... 7

**Chapter 3 Installation Instructions ..... 9**
3.1 Requirements ..... 9
3.2 Mechanical Installation ..... 10
3.3 Electrical Installation ..... 10

**Chapter 4 Operating Instructions ..... 12**
4.1 Output Status Information ..... 12
4.2 USB Status Information ..... 12
4.3 IO-Link Status Information ..... 13

**Chapter 5 Accessories ..... 15**
5.1 Cordsets for the DM1 Module ..... 15
5.2 Cordsets for the DM2 Module ..... 16
5.3 Adapters ..... 16

**Chapter 6 Product Support and Maintenance ..... 17**
6.1 Repairs and Translations (No Field-Replaceable Parts) ..... 17
6.2 Contact Us ..... 19
6.3 Banner Engineering Corp Limited Warranty ..... 19

© Banner Engineering Corp. All rights reserved. www.bannerengineering.com

Chapter Contents

1.1 Models ..... 3
1.2 Important... Read this before proceeding! ..... 4
1.3 Overview ..... 4

# Chapter 1 Product Description

The SI-RFA Diagnostic Module acts as an interface to provide the user with serial data from Banner In-Series Diagnostic (ISD) enabled devices across various interfaces (IO-Link, USB, and PNP output).

**CAUTION:** The SI-RFA Diagnostic Module is not a safety device. This device supplies status information that is not relevant to safety.

*Figure 1. SI-RFA-DM1*



*Figure 2. SI-RFA-DM2*



- Comprehensive diagnostic information for each device and for the entire system (chain of devices)
- Easily retrievable diagnostic data
- Time and cost savings during commissioning, maintenance and fault investigation
- Protection against unexpected machine stops through pre-fault detection
- Diagnostic module can provide the diagnostic information as follows:
  - Directly via IO-Link or an IO-Link Master with gateway
  - Via a laptop with USB interface (model SI-RFA-DM1 only)
- Basic information, such as safety input and safety output status, can be quickly obtained
- Extended diagnostic information and fault information can also be obtained as needed

## 1.1 Models

| Model | Output | Interface |
|---|---|---|
| **SI-RFA-DM1** | 8 digital outputs; 1 diagnostic circuit | IO-Link and USB 2.0 |
| **SI-RFA-DM2** | 1 diagnostic circuit | IO-Link |

Use the SI-RFA Diagnostic Module in conjunction with a chain of Banner ISD-enabled products and a Safety Monitoring device. To obtain the diagnostic information via USB from the SI-RFA-DM1, download the USB In-Series Diagnostic software from www.bannerengineering.com/si-rf.

**WARNING:**

- **The SI-RFA Diagnostic Module only provides status information**, such as which gate is open.
- **Failing to include a Safety Monitoring device in the circuit may create a dangerous condition that may lead to serious injury or death.**
- A Safety Monitoring device is required to provide the safety function.


© Banner Engineering Corp. All rights reserved.
www.bannerengineering.com

**WARNING:**
- Le SI-RFA Diagnostic Module propose uniquement des informations d'état, par exemple pour indiquer quelle porte est ouverte.
- **Ne pas inclure un dispositif de surveillance de la sécurité dans le circuit peut provoquer un risque susceptible d'entraîner des blessures graves, voire mortelles.**
- Un dispositif de surveillance de la sécurité est indispensable pour assurer la fonction de sécurité.

**WARNING:**
- Das SI-RFA Diagnostic Module liefert nur Statusinformationen, z. B. darüber, welche Tür geöffnet ist.
- **Wenn keine Vorrichtung zur Sicherheitsüberwachung in die Schaltung eingebaut wird, kann möglicherweise eine Gefahrsituation entstehen, die zu schweren oder tödlichen Verletzungen führen kann.**
- Für einen funktionierenden Schutz ist eine Vorrichtung zur Sicherheitsüberwachung erforderlich.

**WARNING:**
- Il SI-RFA Diagnostic Module fornisce solo informazioni di stato, ad esempio quale cancello è aperto.
- **La mancata inclusione del dispositivo di monitoraggio di sicurezza nel circuito determina una condizione di pericolo che può comportare gravi lesioni o morte.**
- Per garantire la funzione di sicurezza, è necessario un dispositivo di monitoraggio di sicurezza.

**WARNING:**
- El SI-RFA Diagnostic Module solo proporciona información de estado, por ejemplo, cuál puerta está abierta.
- **No incluir un dispositivo de monitoreo de seguridad en el circuito puede crear una condición peligrosa como causar lesiones graves o la muerte.**
- Se necesita un dispositivo de Control de Seguridad para proporcionar la función de seguridad.

## 1.2 Important... Read this before proceeding!

**The user is responsible for satisfying all local, state, and national laws,** rules, codes, and regulations relating to the use of this product and its application. Banner Engineering Corp. has made every effort to provide complete application, installation, operation, and maintenance instructions. Please contact a Banner Applications Engineer with any questions regarding this product.

**The user is responsible** for making sure that all machine operators, maintenance personnel, electricians, and supervisors are thoroughly familiar with and understand all instructions regarding the installation, maintenance, and use of this product, and with the machinery it controls. The user and any personnel involved with the installation and use of this product must be thoroughly familiar with all applicable standards, some of which are listed within the specifications. Banner Engineering Corp. makes no claim regarding a specific recommendation of any organization, the accuracy or effectiveness of any information provided, or the appropriateness of the provided information for a specific application.

## 1.3 Overview

The SI-RFA Diagnostic Module is used in conjunction with the SI-RF In-Series Diagnostic (ISD) Safety Switches (SI-RFD models), ISD Connects, and/or the Lighted Emergency Stops Buttons with ISD (**SSA-EB1PLx-0Dx** models). The module interprets the ISD signal and converts it to IO-Link and USB (model **SI-RFA-DM1** only) readable information.

The information transmitted from the SI-RFA Diagnostic Module is for status and not a safety function. The output signals from the SI-RFA Diagnostic Module must be wired into a safety evaluation module (for example, a safety controller).

The SI-RFA Diagnostic Module can interpret one chain of ISD enabled devices of up to 32 units. It can quickly provide the status of all 32 devices (on or off) via IO-Link or IO-Link master to any PLC/HMI platform.


© Banner Engineering Corp. All rights reserved.

| SI-RFA-DM1 Status Indicators | | |
|---|---|---|
| **LED** | **Color** | **Status** |
| Power | Green | Power is applied |
| Fault | Red | Fault is detected |
| Diagnostic | Green | Receiving information at the Diagnostic IN terminals |
| IO-Link | Green | Communicating via the IO-Link terminals |

| SI-RFA-DM2 Status Indicators | | |
|---|---|---|
| **LED** | **Color** | **Status** |
| Power | Green | Power is applied |
| Fault | Red | Fault is detected |
| IO-Link | Green | OSSD OK, no IO-link communications |
| | Green flashing at 1 Hz | OSSD OK, IO-link OK |
| | Green flashing at 2 Hz | OSSD Error, IO-link OK |


© Banner Engineering Corp. All rights reserved.
www.bannerengineering.com

Chapter Contents

2.1 SI-RFA-DM1 Diagnostic Module ..... 6
2.2 SI-RFA-DM2 Diagnostic Module ..... 6
2.3 Dimensions ..... 7

# Chapter 2 Specifications

## 2.1 SI-RFA-DM1 Diagnostic Module

**Rated Supply Voltage ($U_e$)**
24 V DC +25%, –20%
Reverse polarity protection
Voltage level according to Type 3 EN 61131-2

**Rated operating current ($I_e$)**
50 mA each signal output

**No-load current**
≤ 15 mA

**Voltage drop ($U_d$)**
< 3.5 V each signal output

**Signal Outputs**
PNP, N.O. (closed by opened protective device)

**Interfaces**
USB 2.0

**Short Circuit Protection**
Yes

**EMC**
According to EN 61326-1 and EN 61131-9

**IO-Link Specifications**
Compliant with IO-Link Spec V 1.1
COM 2 Speed: 38400 baud

**Construction**
Housing: Black PA-GF
Front plate: Light gray PBT

**Indicators**
4 LEDs

**Connections**
Screw terminals

**Operating Conditions**
Ambient and Storage Temperature: 0 °C to 60 °C (32 °F to 140 °F)
Altitude: ≤ 2000 m NHN

**Environmental Rating**
IP20
Protection Class according to EN IEC 61558: III

## 2.2 SI-RFA-DM2 Diagnostic Module

**Rated Supply Voltage ($U_e$)**
24 V DC +25%, –20%
Reverse polarity protection
Voltage level according to Type 3 EN 61131-2

**No-load current ($I_o$)**
≤ 15 mA

**Short Circuit Protection**
Yes

**EMC**
According to EN 61326-1 and EN 61131-9

**Operating Conditions**
Ambient and Storage Temperature: –25 °C to +70 °C (–13 °F to +158 °F)
Altitude: ≤ 2000 m NHN
Maximum relative humidity: 93% at 40 °C non-condensing

**IO-Link Specifications**
Compliant with IO-Link Spec V 1.1
COM 2 Speed: 38400 baud

**Construction**
Housing: Black PBT
Tension Relief: Black TPE

**Indicators**
3 LEDs

**Connections**
0.25 m cable with an 8-pin M12 quick disconnect connector

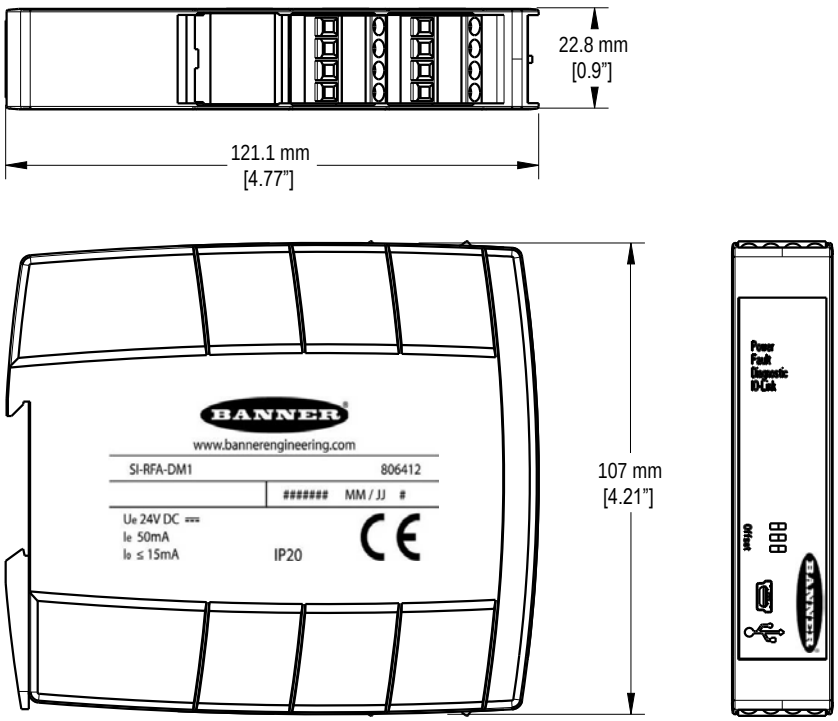
**Environmental Rating**
IP69
Protection Class according to EN IEC 61558: III


© Banner Engineering Corp. All rights reserved.

# 2.3 Dimensions

All measurements are listed in millimeters [inches], unless noted otherwise. The measurements provided are subject to change.

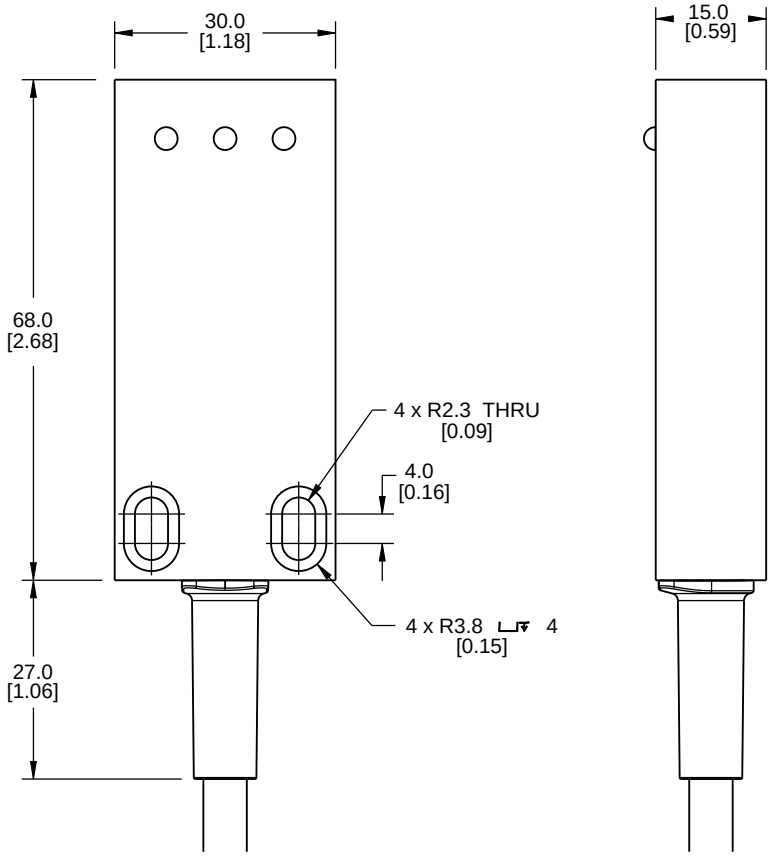
*Figure 3. SI-RF-DM1 Module*





© Banner Engineering Corp. All rights reserved.
www.bannerengineering.com

*Figure 4. SI-RF-DM2 Module*





© Banner Engineering Corp. All rights reserved.
www.bannerengineering.com

Chapter Contents

3.1 Requirements ..... 9
3.2 Mechanical Installation ..... 10
3.3 Electrical Installation ..... 10

# Chapter 3 Installation Instructions

## 3.1 Requirements

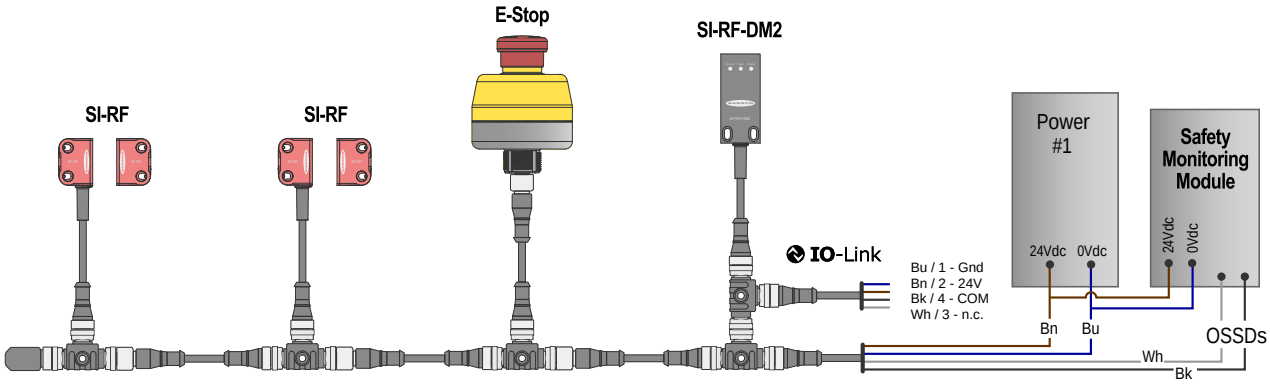
To be able to receive data from all the ISD-enabled devices in the chain with the SI-RFA Diagnostic Module, wire the SI-RFA Diagnostic Module between the last switch in the chain and the safety evaluation module.

*Figure 5. Connecting the SI-RF in series with a DM1 and monitoring device*




Every SI-RFA Diagnostic Module has a USB Mini B port and IO-Link connections.

*Figure 6. The SI-RFA-DM2 can be connected using a t-adapter (SI-RFA-TS) connected to a reset t-adapter (SI-RFA-TK)*





© Banner Engineering Corp. All rights reserved.
www.bannerengineering.com

## 3.2 Mechanical Installation

Install the SI-RFA inside an enclosure; it is not designed for exposed wiring. It is the user's responsibility to house the module in an enclosure with NEMA 3 (IEC IP54) rating, or better. The module mounts directly to standard 35 mm DIN rail.

**Heat Dissipation Considerations**—For reliable operation, ensure that the operating specifications are not exceeded. The enclosure must provide adequate heat dissipation, so that the air closely surrounding the module does not exceed the maximum operating temperature stated in the specifications. Methods to reduce heat build-up include venting, forced airflow (e.g. exhaust fans), adequate enclosure exterior surface area, and spacing between modules and other sources of heat.

The **SI-RFA-DM2** can be mounted in any position as long as it is protected from damage. The cabling must also be protected from damage. The unit does not need to be mounted inside of an enclosure (it is rated to IP69).

## 3.3 Electrical Installation

**CAUTION:** The diagnostic data is not relevant to safety.

**WARNING:**

- **Risk of electric shock**
- Use extreme caution to avoid electrical shock. Serious injury or death could result.
- Always disconnect power from the safety system (for example, device, module, interfacing, etc.), guarded machine, and/or the machine being controlled before making any connections or replacing any component. Lockout/tagout procedures might be required. Refer to OSHA 29CFR1910.147, ANSI Z244-1, or the applicable standard for controlling hazardous energy.
- Make no more connections to the device or system than are described in this manual. Electrical installation and wiring must be made by a Qualified Person[1] and must comply with the applicable electrical standards and wiring codes, such as the NEC (National Electrical Code), NFPA 79, or IEC 60204-1, and all applicable local standards and codes.

The SI-RFA requires 24 V DC power. Wire the +24 V DC to pin 01 and wire common (0 V DC) to pin 04.

Wire the output signals from the last SI-RFD Safety Switch in the series to the SI-RFA Input 1 and 2 (pins 05 and 06). Wire the SI-RFA Output 1 and 2 (pins 07 and 08) to the safety evaluation module for the safety actions of the circuit.

The unit has 8 PNP outputs (pins 9 through 16) that can provide actuator presence or absence status (non-safety). The output is high (+24 V DC) when an actuator is not detected (door open) and low when an actuator is detected (door closed).

**TIP:** For high and uniquely coded units, the PNP output still changes states when any actuator is presented. To distinguish between any actuator and the correct actuator, use a PLC to compare the PNP output with the status of the safety outputs (this helps determine attempts at tampering with the system).

[1] A person who, by possession of a recognized degree or certificate of professional training, or who, by extensive knowledge, training and experience, has successfully demonstrated the ability to solve problems relating to the subject matter and work.

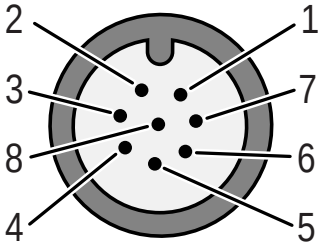

© Banner Engineering Corp. All rights reserved.
www.bannerengineering.com

| Wiring Terminal | Function |
|---|---|
| 01 | +24 V DC |
| 02 | IO-Link 24 V |
| 03 | IO-Link COM |
| 04 | 0 V DC |
| 05 | Safety Diagnostic 1 IN |
| 06 | Safety Diagnostic 2 IN |
| 07 | Safety Diagnostic 1 OUT |
| 08 | Safety Diagnostic 2 OUT |

| Wiring Terminal | Function |
|---|---|
| 09 | PNP Status Output 01 |
| 10 | PNP Status Output 02 |
| 11 | PNP Status Output 03 |
| 12 | PNP Status Output 04 |
| 13 | PNP Status Output 05 |
| 14 | PNP Status Output 06 |
| 15 | PNP Status Output 07 |
| 16 | PNP Status Output 08 |

The simplest wiring of the **SI-RFA-DM2** uses the t-adapter **SI-RFA-TK** and a **MQDC-4xx** cordset. Connect the blue wire (pin 3) to DC COM and the brown (pin 1) to +24 V DC. The white wire (pin 2) is not connected, and the black wire (pin 4) is the IO-Link Communication line.

If the simplified wiring for the ISD chain is not used, the 8-pin connections must be wired as shown below.

| 8-pin Male Connection | Pin | Function |
|---|---|---|
|  | 1 | + 24 V DC |
| | 2 | Output 1 (Q1) |
| | 3 | DC COM |
| | 4 | Output 2 (Q2) |
| | 5 | Input 1 (I1) |
| | 6 | Input 2 (I2) |
| | 7 | IO-Link communication |
| | 8 | No connection |


© Banner Engineering Corp. All rights reserved.
www.bannerengineering.com

Chapter Contents

4.1 Output Status Information ..... 12
4.2 USB Status Information ..... 12
4.3 IO-Link Status Information..... 13

# Chapter 4 Operating Instructions

## 4.1 Output Status Information

The eight PNP outputs (pins 09 to 16 of the **SI-RFA-DM1**) can provide the status of eight consecutive doors.

- High (+24 V DC) - Door open (actuator not detected)
- Low (0 V DC) - Door closed (actuator detected)
- Cycling - Sensor at its maximum range (minimum signal)

**TIP:** For high and uniquely coded sensors, the PNP outputs change state when any actuator is detected.

These eight PNP outputs can be used to indicate which door is open. They can also provide information that a door's alignment is poor (at maximum range). Each module can provide status of eight doors. If more door monitoring is needed, the modules can be cascaded (Safety Diagnostic Outputs of one module go into the Safety Diagnostic Inputs of the next module). Each module can be set to provide the status of a different series of 8 sensors based on the position of switch 1 and 2 of the Offset switch on the top of the module.

| Switch 1 | Switch 2 | PNP Output Status |
|---|---|---|
| Off | Off | Displays status of switches 1 to 8 (default setting) |
| On | Off | Displays status of switches 9 to 16 |
| Off | On | Displays status of switches 17 to 24 |
| On | On | Displays status of switches 25 to 32 |

Switch 1 is the furthest from the SI-RFA (closest to the terminating plug, **SI-RFA-P**). To engage the maximum range signal, turn on switch 3 of the Offset switches.

## 4.2 USB Status Information

The SI-RFA Diagnostic Module provides an interface for displaying switch information on a computer. The computer must be connected to the device with a standard USB A (computer side) to Mini B (module site) USB cable (see "Accessories" on page 15).

Download the SI-RF diagnostic software from www.bannerengineering.com, under Software in the download section of the SI-RF Safety Switch or SI-RFA Diagnostic Module page.

The SI-RF diagnostic software can be used to configure the information received from the series of ISD units (set the number of units in the string).


© Banner Engineering Corp. All rights reserved.
www.bannerengineering.com

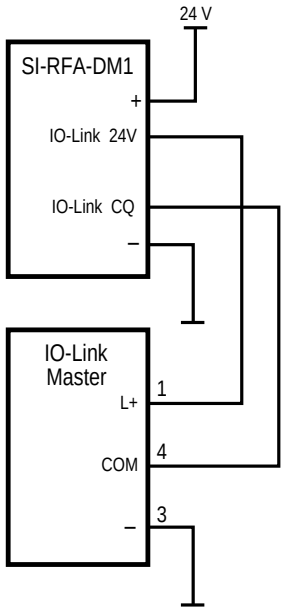
# 4.3 IO-Link Status Information

The SI-RFA offers an IO-Link interface for bus-independent transmission of diagnostic data into an industrial network.

The module has an IO-Link 24 V connection (pin 02) and IO-Link common/GND connection (pin 03). If you are using an IO-Link master, connect the IO-Link master's L+ to pin 02 and the COM to pin 03.

Download the IODD needed for configuration from www.bannerengineering.com in the Product Data Files section of the SI-RF Safety Switch or SI-RFA page.

The SI-RFA-DM1 IO-Link Data Reference Guide (p/n 212340) provides an overview of the IO-Link data structure. This document can be found in the Technical Literature section on the module page.




| Information | Meaning |
|---|---|
| Actuator Detected | Actuator detected or not detected |
| Wrong Actuator | Correct actuator code or not (high & unique units) |
| Actuator code not taught-in | Actuator code saved or not saved |
| Safety Input 1 | On/Off |
| Safety Input 2 | On/Off |
| Safety Output 1 | On/Off |
| Safety Output 2 | On/Off |
| Local Reset | Local reset required |
| Operating Voltage Warning | Operating voltage is OK or ±5% to end of the voltage range |
| Operating Voltage 24V | Operating voltage is OK or outside of specification |
| Additional Sensor Functions | Display of the additional function of the sensor, e.g. local reset coding level, etc. |
| Number of Remaining Teach-In Operations | Shows remaining number of teach in cycles available |
| Received Actuator Code | Indication of the actuator code |
| Time actuator in detection limit | Time in hours since actuator is detected in detection area |
| Output error switch-off time | The remaining time, in minutes, until the sensor switches off the safety outputs after an error has been detected on one output channel |
| Operating Voltage Warning | Information on the frequency of operating voltage warnings |
| Sensor Temperature | Indicates the sensor temperature in °C |
| Supplied Voltage Applied | Indicates the applied voltage in volts |
| Actuator Distance | Indicates the actuator distance in % to the maximum sensing distance |

See the manual of the ISD enabled devices for the complete list of ISD information available from that device.

Each ISD-enabled safety device has an internal error memory that keeps records of the current status of the sensor. The logged events are:

- Operating voltage errors
- Incorrect actuator detected (only for high and unique coded sensors)
- Actuator at limit of detection range
- Status of safety outputs 1 and 2


© Banner Engineering Corp. All rights reserved.
www.bannerengineering.com

Up to 512 of these error events are stored permanently with date and time. If further events occur, the oldest entry is overwritten. To facilitate output of error data with the correct time and date, synchronize with the SI-RF Diagnostic Software.


© Banner Engineering Corp. All rights reserved.

Chapter Contents

5.1 Cordsets for the DM1 Module ..... 15
5.2 Cordsets for the DM2 Module ..... 16
5.3 Adapters ..... 16

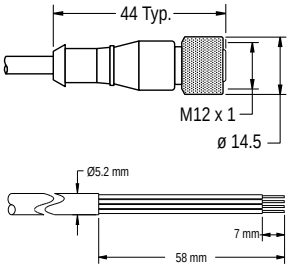
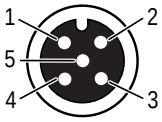
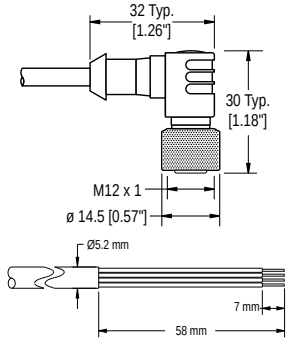
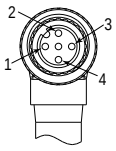
# Chapter 5 Accessories

## 5.1 Cordsets for the DM1 Module

The following cordsets may be used with the DM1 module.

**USB-USBM-1**

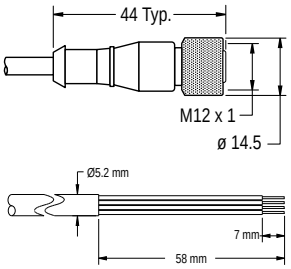
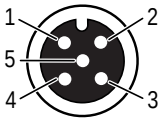
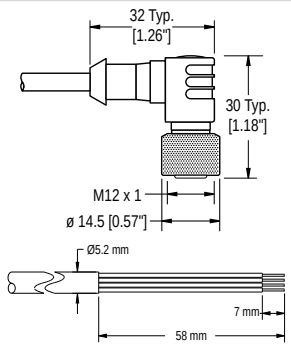
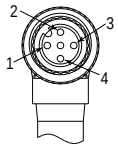
- USB-A to USB-Mini B
- 1 meter

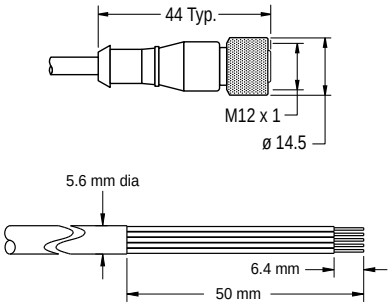
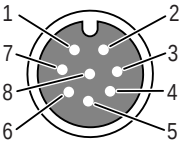
| 4-Pin Single-Ended M12 Female Cordsets | | | | | |
|---|---|---|---|---|---|
| **Model** | **Length** | **Style** | **Dimensions** | **Pinout (Female)** | |
| **MQDC-406** | 2 m (6.56 ft) | Straight |  |  | 1 = Brown<br>2 = White<br>3 = Blue<br>4 = Black<br>5 = Not used |
| **MQDC-415** | 5 m (16.4 ft) | | | | |
| **MQDC-430** | 9 m (29.5 ft) | | | | |
| **MQDC-450** | 15 m (49.2 ft) | | | | |
| **MQDC-406RA** | 2 m (6.56 ft) | Right-Angle |  |  | |
| **MQDC-415RA** | 5 m (16.4 ft) | | | | |
| **MQDC-430RA** | 9 m (29.5 ft) | | | | |
| **MQDC-450RA** | 15 m (49.2 ft) | | | | |


© Banner Engineering Corp. All rights reserved.
www.bannerengineering.com

# 5.2 Cordsets for the DM2 Module

The following cordsets may be used with the DM2 module

| 4-Pin Single-Ended M12 Female Cordsets | | | | | |
|---|---|---|---|---|---|
| **Model** | **Length** | **Style** | **Dimensions** | **Pinout (Female)** | |
| **MQDC-406** | 2 m (6.56 ft) | Straight |  |  | 1 = Brown<br>2 = White<br>3 = Blue<br>4 = Black<br>5 = Not used |
| **MQDC-415** | 5 m (16.4 ft) | | | | |
| **MQDC-430** | 9 m (29.5 ft) | | | | |
| **MQDC-450** | 15 m (49.2 ft) | | | | |
| **MQDC-406RA** | 2 m (6.56 ft) | Right-Angle |  |  | |
| **MQDC-415RA** | 5 m (16.4 ft) | | | | |
| **MQDC-430RA** | 9 m (29.5 ft) | | | | |
| **MQDC-450RA** | 15 m (49.2 ft) | | | | |

| 8-pin A-Code Single-Ended M12 Female Cordsets (datasheet p/n 235941) | | | | |
|---|---|---|---|---|
| **Model** | **Length** | **Dimensions (mm)** | **Pinout (Female)** | |
| **BC-M12F8-24-1** | 1 m (3.28 ft) |  |  | 1 = White<br>2 = Brown<br>3 = Green<br>4 = Yellow<br>5 = Gray<br>6 = Pink<br>7 = Blue<br>8 = Red |
| **BC-M12F8-24-2** | 2 m (6.56 ft) | | | |
| **BC-M12F8-24-5** | 5 m (16.4 ft) | | | |
| **BC-M12F8-24-10** | 10 m (30.81 ft) | | | |

# 5.3 Adapters

| Model | Description |
|---|---|
| **SI-RFA-TS** | SI-RF T-adapter for series connection, 4-pin to 8-pin to 4-pin |
| **SI-RFA-TK** | SI-RF T-adapter for connection of the reset button, 8-pin to 4-pin to 8-pin |
| **SI-RFA-P** | SI-RF Termination plug M12 |


© Banner Engineering Corp. All rights reserved.
www.bannerengineering.com

Chapter Contents

6.1 Repairs and Translations (No Field-Replaceable Parts) ..... 17
6.2 Contact Us ..... 19
6.3 Banner Engineering Corp Limited Warranty ..... 19

# Chapter 6 Product Support and Maintenance

## 6.1 Repairs and Translations (No Field-Replaceable Parts)

**English**

Contact Banner Engineering for troubleshooting of this device. **Do not attempt any repairs to this Banner device; it contains no field-replaceable parts or components.** If the device, device part, or device component is determined to be defective by a Banner Applications Engineer, they will advise you of Banner's RMA (Return Merchandise Authorization) procedure.

```
IMPORTANT: If instructed to return the device, pack it with care. Damage that occurs in return shipping is not covered by warranty.
```

Obtain assistance with product repairs by contacting your local Banner Engineering Corp distributor or by calling Banner directly at (763) 544-3164. Access literature translated into your native language on the Banner website at www.bannerengineering.com or contact Banner directly at (763) 544-3164.

**Deutsch**

Wenden Sie sich zur Fehlerbehebung dieses Geräts an Banner Engineering. **Versuchen Sie nicht, Reparaturen an diesem Banner-Gerät vorzunehmen. Das Gerät enthält keine am Einsatzort auszuwechselnden Teile oder Komponenten.** Wenn ein Banner-Anwendungstechniker zu dem Schluss kommt, dass dieses Gerät, ein Teil oder eine Komponente davon defekt ist, erhalten Sie von dem Techniker Erläuterungen zu Banners RMA-Verfahren (Return Merchandise Authorization) für die Warenrückgabe.

```
WICHTIG: Wenn Sie der Techniker anweist, das Gerät zurückzusenden, verpacken Sie es bitte sorgfältig. Transportschäden bei der Rücksendung werden von der Garantie nicht abgedeckt.
```

Unterstützung bei Produktreparaturen erhalten Sie von Ihrem örtlichen Banner Engineering Corp Händler oder direkt von Banner unter Tel. (763) 544-3164. Die in Ihre Muttersprache übersetzte Literatur finden Sie auf der Banner-Website unter www.bannerengineering.com oder kontaktieren Sie Banner direkt unter Tel. (763) 544-3164.

**Français**

Pour plus d'informations sur le dépannage du produit, contactez Banner Engineering. **Ne tentez pas de réparer ce dispositif Banner. Il ne contient aucun composant ou pièce qui puisse être remplacé sur place.** Si un ingénieur de Banner conclut que le dispositif ou l'une de ses pièces ou composants est défectueux, il vous informera de la procédure à suivre pour le retour des produits (RMA).

```
Important : Si vous devez retourner le dispositif, emballez-le avec soin. Les dégâts occasionnés pendant le transport de retour ne sont pas couverts par la garantie.
```

Pour vous aider lors de la réparation de produits, contactez votre distributeur Banner local our appelez directement Banner au (763) 544-3164. La documentation traduite dans votre langue est disponible sur le site internet de Banner www.bannerengineering.com ou contactez directement Banner au (763) 544-3164.

**Italiano**

Per le procedure di individuazione e riparazione dei guasti di questo dispositivo, contattare Banner Engineering. **Non tentare di riparare questo dispositivo Banner, in quanto non contiene parti o componenti sostituibili dall'utente.** Se il dispositivo, una parte del dispositivo o un componente del dispositivo viene riscontrato difettoso da un tecnico Banner, il nostro personale vi comunicherà la procedura da seguire per ottenere l'autorizzazione al reso.

```
Importante: Se si ricevono istruzioni di rispedire il dispositivo al produttore, imballarlo con cura. I danni dovuti al trasporto non sono coperti dalla garanzia.
```

Per assistenza nelle riparazioni dei prodotti, contattare il distributore locale Banner Engineering Corp o contattare direttamente Banner al numero (763) 544-3164. È possibile accedere alla documentazione tradotta nella propria lingua madre sul sito Web Banner all'indirizzo www.bannerengineering.com o contattare direttamente Banner al numero (763) 544-3164.


© Banner Engineering Corp. All rights reserved.
www.bannerengineering.com

**Español**

Comuníquese con Banner Engineering para solucionar de problemas de este dispositivo. **No intente ninguna reparación a este dispositivo de Banner, contiene piezas o componente que no se pueden cambiar en terreno.** Si algún ingeniero de aplicaciones de Banner determina que el dispositivo, alguna de las piezas o alguno de los componentes del dispositivo está defectuoso, le informará el procedimiento de autorización de devolución de mercancía (RMA, por sus siglas en inglés) de Banner.

**Importante:** Si se le solicita devolver el dispositivo, empáquelo con cuidado. Puede haber daños durante el envío de devolución que no estén cubiertos por la garantía.

Para reparaciones de productos, por favor contacte a su distribuidor local de Banner Engineering o llame a Banner directamente al 00 1 (763) 544-3164. Vea la literatura traducida en su idioma en el sitio web Banner en www.bannerengineering.com o comuníquese con Banner directamente al 00 1 (763) 544-3164.

**中国人**

如需对本装置进行故障排查，请联系邦纳。**请勿尝试自行维修该邦纳装置；本装置不包含任何可在现场更换的部件或组件。** 若经邦纳应用工程师确认设备、设备部件或组件存在缺陷，他们将告知您邦纳退货授权 (RMA) 流程。

**重要注意事项：** 如被要求退回装置，请妥善包装后寄回。退货运输过程中发生的损坏不在保修范围内。

请联系当地的 Banner Engineering Corp 经销商或直接致电 Banner +1 (763) 544-3164，以获得产品维修帮助。请访问邦纳网站 www.bannerengineering.com 或直接拨打 +1 (763) 544-3164 联系邦纳，获取翻译成您母语的资料。

**한국인**

이 장치의 문제를 해결하려면 Banner Engineering에 문의하십시오. **이 Banner 장치에는 현장에서 교체할 수 있는 부품 또는 구성품이 없으므로 수리를 시도하지 마십시오.** Banner 애플리케이션 엔지니어가 장치, 장치 부품 또는 장치 구성품에 결함이 있는 것으로 판정하면, Banner의 RMA(제품 반송 승인)절차에 대해 안내해 드립니다.

**중요:** 제품을 반송하도록 안내 받으셨다면 잘 포장해주십시오. 반송 도중에 발생한 손상은 보증 서비스가 적용되지 않습니다.

제품 수리에 대한 지원은 지역 Banner Engineering Corp 대리점에 문의하거나 Banner에 직접 (763) 544-3164로 문의하실 수 있습니다. 사용자의 모국어로 번역된 자료는 Banner 웹사이트 www.bannerengineering.com에서 액세스하거나 Banner에 직접 (763) 544-3164로 문의하실 수 있습니다.

**日本語**

この装置のトラブルシューティングについては、バナーエンジニアリングにお問い合わせください。**このバナー装置には、現場では交換できない部品またはコンポーネントが含まれているため、修理を試みてはいけません。** バナーのアプリケーションエンジニアが装置、装置の部品、または装置のコンポーネントに欠陥があると判断した場合、バナーのRMA（返品承認）手続きについてお知らせします。

**重要 ：** 返品を指示された場合は、装置を丁寧に梱包してください。返品時に発生した破損は保証の対象外となります。

製品の修理については、最寄りのBanner Engineering Corp代理店にお問い合わせいただくか、米国+1 (763) 544-3164まで直接お電話でお問い合わせください。バナーのウェブサイト（www.bannerengineering.com）でお客様の言語に翻訳された資料にアクセスするか、米国+1 (763) 544-3164まで直接お電話でお問い合わせください。

**čeština**

Pro řešení problémů se zařízením kontaktujte společnost Banner Engineering. **Neprovádějte žádné opravy zařízení Banner. Neobsahují žádné komponenty nebo části, které by byly vyměnitelné.** Pokud je zařízení, jeho část nebo díl označen technikem společnosti Banner jako poškozený, bude Vám doporučeno vyplnit reklamační RMA protokol.

**Důležité:** Pokud byl vydán požadavek na vrácení zařízení, pečlivě ho zabalte. Poškození vzniklé při dopravě není považováno za záruční opravu.

Pokud produkt potřebuje opravu, vyžádejte si pomoc od místního distributora společnosti Banner Engineering Corp nebo přímo na telefonním čísle (763) 544-3164. Dokumentaci přeloženou do vašeho jazyka si vyhledejte na webových stránkách společnosti Banner na adrese www.bannerengineering.com nebo se obraťte přímo na společnost Banner na telefonním čísle (763) 544-3164.


© Banner Engineering Corp. All rights reserved.
www.bannerengineering.com

**Polski**

W celu rozwiązania problemów z urządzeniem należy skontaktować się z działem technicznym firmy Banner Engineering. **Pod żadnym pozorem nie próbuj naprawiać tego urządzenia firmy Banner; nie zawiera ono części ani elementów, które można wymieniać samodzielnie.** Jeśli urządzenie, jego część lub element zostaną uznane za wadliwe przez inżyniera technicznego Banner, poinformuje on użytkownika o firmowej procedurze zwrotu towaru (RMA) firmy Banner.

**Ważne:** Jeśli urządzenie ma zostać zwrócone, należy je starannie zapakować. Uszkodzenia powstałe podczas odsyłki nie są objęte gwarancją.

Aby uzyskać pomoc w zakresie naprawy produktu, należy skontaktować się z lokalnym dystrybutorem Banner Engineering Corp lub zadzwonić bezpośrednio do firmy Banner pod numer (763) 544-3164. Dostęp do literatury przetłumaczonej na swój język ojczysty można uzyskać na stronie internetowej firmy Banner pod adresem www.bannerengineering.com lub kontaktując się bezpośrednio z firmą Banner pod numerem (763) 544-3164.

**Português**

Entre em contato com a Engenharia da Banner para a solução de problemas deste dispositivo. **Não tente fazer nenhum reparo neste dispositivo Banner; ele não contém peças ou componentes substituíveis em campo.** Se um técnico de aplicações da Banner determinar que o dispositivo, peça ou componente do dispositivo está com defeito, ele o informará sobre o procedimento de RMA (Autorização de Devolução de Mercadoria) da Banner.

**Importante:** Se for instruído a devolver o dispositivo, embale-o com cuidado. Os danos ocorridos no transporte de devolução não são cobertos pela garantia.

Obtenha assistência para reparos do produto entrando em contato com o distribuidor local da Banner Engineering Corp ou ligando diretamente para a Banner no telefone (763) 544-3164. Acesse a literatura traduzida para seu idioma nativo no site da Banner em www.bannerengineering.com ou entre em contato diretamente com a Banner pelo telefone (763) 544-3164.

**Türkçe**

Bu cihazda sorun giderme işlemleri için Banner Engineering ile iletişime geçin. **Bu Banner cihazını onarmaya çalışmayın; cihaz sahada değiştirilebilir parça veya bileşen içermez.** Bir Banner Uygulama Mühendisi tarafından cihazın, cihazın bir parçasının veya bir cihaz bileşeninin kusurlu olduğu tespit edilirse, Banner RMA (İade Mal Yetkilendirme) prosedürü hakkında bilgilendirilirsiniz.

**ÖNEMLİ:** İade etmeniz istenirse, cihazı dikkatli bir şekilde paketleyin. İade nakliyesinde meydana gelecek hasarlar garanti kapsamında değildir.

Yerel Banner Engineering Corp distribütörünüzle iletişime geçerek veya doğrudan (763) 544-3164 numaralı telefondan Banner'ı arayarak ürün onarımlarıyla ilgili yardım alın. Ana dilinize çevrilmiş dokümanlara www.bannerengineering.com adresindeki Banner web sitesinden erişebilir veya (763) 544-3164 numaralı telefondan doğrudan Banner ile iletişime geçebilirsiniz.

## 6.2 Contact Us

Banner Engineering Corp. | 9714 Tenth Avenue North | Plymouth, MN 55441, USA | Phone: + 1 888 373 6767

For worldwide locations and local representatives, visit www.bannerengineering.com.

## 6.3 Banner Engineering Corp Limited Warranty

Banner Engineering Corp. warrants its products to be free from defects in material and workmanship for one year following the date of shipment. Banner Engineering Corp. will repair or replace, free of charge, any product of its manufacture which, at the time it is returned to the factory, is found to have been defective during the warranty period. This warranty does not cover damage or liability for misuse, abuse, or the improper application or installation of the Banner product.

**THIS LIMITED WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES WHETHER EXPRESS OR IMPLIED (INCLUDING, WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE), AND WHETHER ARISING UNDER COURSE OF PERFORMANCE, COURSE OF DEALING OR TRADE USAGE.**

This Warranty is exclusive and limited to repair or, at the discretion of Banner Engineering Corp., replacement. **IN NO EVENT SHALL BANNER ENGINEERING CORP. BE LIABLE TO BUYER OR ANY OTHER PERSON OR ENTITY FOR ANY EXTRA COSTS, EXPENSES, LOSSES, LOSS OF PROFITS, OR ANY INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES RESULTING FROM ANY PRODUCT DEFECT OR FROM THE USE OR INABILITY TO USE THE PRODUCT, WHETHER ARISING IN CONTRACT OR WARRANTY, STATUTE, TORT, STRICT LIABILITY, NEGLIGENCE, OR OTHERWISE.**

Banner Engineering Corp. reserves the right to change, modify or improve the design of the product without assuming any obligations or liabilities relating to any product previously manufactured by Banner Engineering Corp. Any misuse, abuse, or improper application or installation of this product or use of the product for personal protection applications when the product is identified as not intended for such purposes will void the product warranty. Any modifications to this product without prior express approval by Banner Engineering Corp will void the product warranties. All specifications published in this document are subject to change; Banner reserves the right to modify product specifications or update documentation at any time. Specifications and product information in English supersede that which is provided in any other language. For the most recent version of any documentation, refer to: www.bannerengineering.com.

For patent information, see www.bannerengineering.com/patents.


© Banner Engineering Corp. All rights reserved.
www.bannerengineering.com

LinkedIn

X

Facebook

Instagram



© 2026. All rights reserved.
www.bannerengineering.com