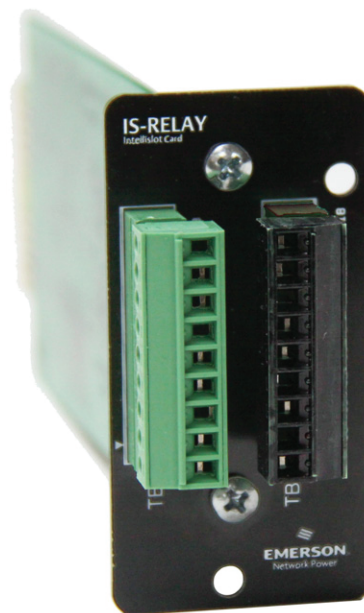


# IntelliSlot® Relay Card

User Manual



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# 1.0 Introduction

The IntelliSlot relay card (IS-RELAY) provides contact closure for remote monitoring of alarm conditions in your SolaHD UPS. The IntelliSlot relay card is easy to install and integrates with other relay contact monitoring systems.

This advanced power management device is designed to function in units with a IntelliSlot port, such as:

- S4KC Series
- S5K Series

Please visit our Web site at [www.solahd.com](http://www.solahd.com) for the current list of supported products.

On supported units, the inverter shut-off command can be controlled from the computer directly connected to the UPS (via the factory-installed DB9 connector) and will conserve battery power after the workstation shutdown is complete.

The IntelliSlot relay card is rated for 24 V ac/V dc at 1 A.

## 1.1 Inspecting Shipment on Receipt

Upon accepting shipment, inspect the packaging and product for any damaged or missing parts. If any damage is observed, report it to the shipping company and your local SolaHD representative immediately. If any components are missing, contact your local SolaHD representative for replacement.

Items included with the shipment are:

- IntelliSlot relay card protected by an anti-static bag
- User manual

# 2.0 Installation

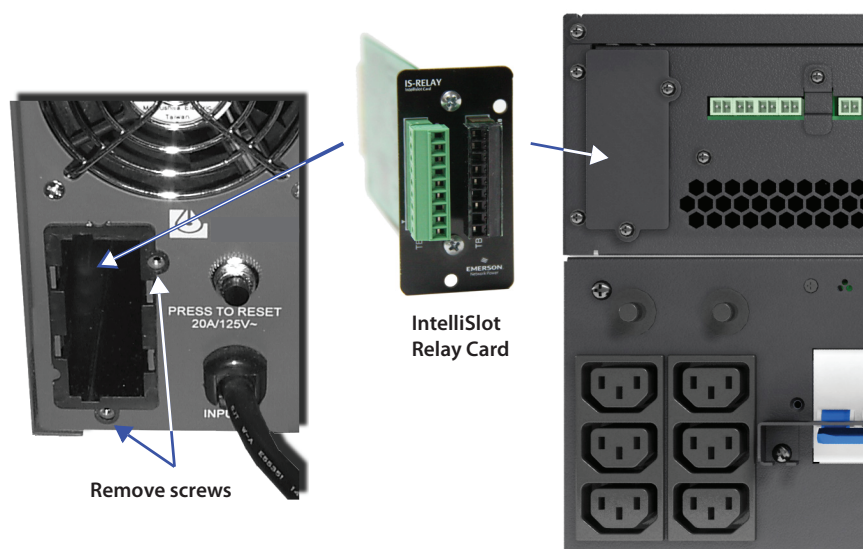
## 2.1 Required Parts & Tools

**NOTE:** Make sure you have the following parts and tools before you begin the installation.

- IntelliSlot relay card (provided)
- #2 (medium) Phillips or small flathead screwdriver

## 2.2 Installation Instructions

1. Turning off the UPS prior to installation is suggested, although not required.
2. Locate the IntelliSlot port. (See examples in Figure 1.) Refer to the UPS user manual for port location and orientation.
3. Remove the two retaining screws from the IntelliSlot port cover plate (see Figure 1). Save the screws for reassembly in Step 5.
4. Insert the IntelliSlot relay card. Make sure the holes are aligned with those on the UPS. Initially, the card should slide in freely as you carefully align the screw holes. As you feel it click into place, press firmly to ensure solid seating in the slot.
5. Use the screwdriver to secure the IntelliSlot relay card to the UPS chassis with the two retaining screws removed in Step 3. Make sure the screws are snug, not tight, to avoid damage to the device.



**Figure 1: Installation**

6. Use these guidelines for terminal block specifications:

**Acceptable wire size:** 24–16 AWG

**Wire strip length:** 0.24–0.28 in. (6–7 mm)

Please proceed to Sections “3.0 Pin Configuration” and “4.0 Jumper Setup” to configure the terminal blocks and jumpers.

# 3.0 PIN Configuration

The IntelliSolt relay card has two terminals blocks, TB1 (green, numbered 1–9) and TB2 (black, numbered 10–18), as shown in Figure 2.

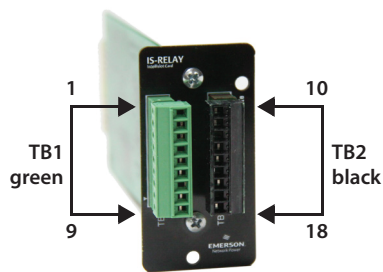


Figure 2: PIN location & numbering

Please refer to the UPS User manual for the UPS terminal block configuration. The PIN functions in Table 1 apply only to the SolaHD units listed in Section “1.0 Introduction”.

| Table 1: IntelliSlot Relay Card PIN Configuration |                        |                                                  |
|---------------------------------------------------|------------------------|--------------------------------------------------|
| PIN                                               | Function               | Operation                                        |
| 1                                                 | Common — Low Battery   |                                                  |
| 2                                                 | Low Battery            | Closed if Low Battery point occurs               |
| 3                                                 | Low Battery            | Closed if battery is OK                          |
| 4                                                 | Common — UPS Fault     |                                                  |
| 5                                                 | UPS Fault              | Closed if UPS Fault occurs                       |
| 6                                                 | UPS Fault              | Closed if no UPS failure                         |
| 7                                                 | Common — On Battery    |                                                  |
| 8                                                 | On Battery             | Closed if On Battery power (utility failure)     |
| 9                                                 | On Battery             | Closed if not On Battery power (utility OK)      |
| 10                                                | Signal Ground          | Use for UPS Any-Mode Shutdown                    |
| 11                                                | Signal Ground          | Use for UPS Any-Mode Shutdown                    |
| 12                                                | UPS Any-Mode Shutdown  | Turn UPS output off when shorted to PIN 10 or 11 |
| 13                                                | Summary Alarm          | Closed if no alarm conditions are present        |
| 14                                                | Summary Alarm          | Closed if Summary Alarm occurs                   |
| 15                                                | Common — Summary Alarm |                                                  |
| 16                                                | On UPS                 | Closed if ON UPS (inverter) power                |
| 17                                                | On Bypass              | Closed if On Bypass                              |
| 18                                                | Common — On Bypass     |                                                  |

# 4.0 Jumper Setup

The IntelliSlot relay card has five jumpers, P3 through P7, as shown in Figure 2. Each jumper connects two PINs.

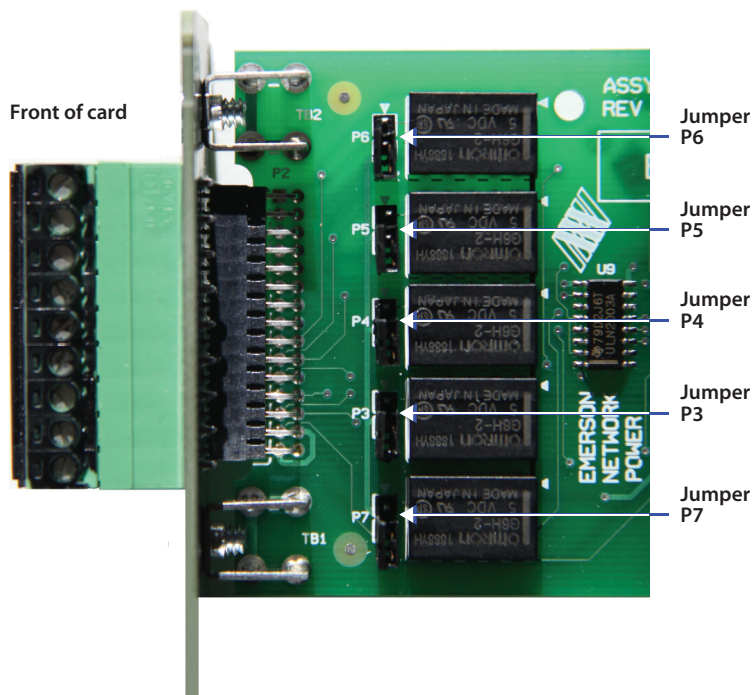


Figure 3: Jumper location & numbering

By default, all five jumpers have shunts installed. The two PINs are shunted together to provide the functions shown in Table 2, allowing relay commons to be tied together.

**NOTE:** The jumpers should be removed if there are any external voltage sources that may intentionally or inadvertently be connected to the relay. Removing the shunt from any two PINs breaks the connection between the relay commons so they are not tied together.

| Table 2: Jumper Connections |               |
|-----------------------------|---------------|
| Jumper                      | Relay         |
| P6                          | On Battery    |
| P5                          | UPS Fault     |
| P4                          | Low Battery   |
| P3                          | On Bypass     |
| P7                          | Summary Alarm |

# 5.0 Technical Support

## 5.1 Contact Information

To contact SolaHD technical support, please use one of the following methods:

- **Phone:** 1.800.377.4384 (US) or 1.847.268.6651 (International)
- **E-mail:** [solahd.technicalservices@emerson.com](mailto:solahd.technicalservices@emerson.com)
- **Web site:** [www.solahd.com](http://www.solahd.com)



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