



DA-PRP-HSR Expansion Module Quick Installation Guide

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Overview

The DA-PRP-HSR expansion module is compliant with IEC 62439-3 Clause 4 (PRP) and IEC 62439-3 Clause 5 (HSR) to ensure the highest system availability and data integrity for mission-critical applications that require zero-time recovery and redundancy.

With dual Gigabit Ethernet port design, the DA-PRP-HSR provides high performance for redundant network systems. In addition, the DA-PRP-HSR features a built-in native PRP/HSR management middleware with MMS server that allows SCADA to collect IEC 62439-3 registers from multiple devices for easy network diagnosis, troubleshooting, device management, and monitoring.

Moxa's DA-820 series industrial computer with the DA-PRP/HSR is the ideal solution for power substation automation and process automation systems.

Package Checklist

The expansion module is shipped with the following items:

- DA-PRP-HSR expansion module
- Two Ethernet cable: RJ45 to RJ45 cross-over cable, 100 cm
- Documentation CD or DVD
- Quick Installation Guide (printed)

Note: If any of the above items are missing or damaged, please contact your sales representative.

Installing a DA-PRP-HSR

You can install up to three DA-PRP-HSR expansion modules in a DA-820 computer.

To install the DA-PRP-HSR, complete the following steps:

1. Turn off the DA-820 computer and disconnect it from the power source.
2. Loosen the screws on the rear of the DA-820 computer and remove the top cover.
3. Remove the slot cover from a PCI slot on the rear panel. You can install the DA-PRP-HSR in any of the three PCI slots in the DA-820 computer.

4. On the DA-PRP-HSR, turn the card index selection switch to 1 if this is the first DA-PRP-HSR you are installing in the DA-820 computer. Similarly, turn the card index selection switch to 2 for the second DA-PRP-HSR and turn the card index selection switch to 3 for the third DA-PRP-HSR.
5. Align the PCI connector on the DA-PRP-HSR with the PCI connector on the system board; then, press to insert the DA-PRP-HSR.
6. Fasten the screw on the PCI slot to secure the DA-PRP-HSR to the system chassis.
7. Reinstall the top cover on the DA-820.
8. Install the driver to start using the DA-PRP-HSR and configure the PRP/HSR settings. For detailed installation procedure, see the *DA-PRP-HSR Expansion Module Installation Guide*.

Installing the Driver and Utility

NOTE The DA-PRP-HSR driver and utility are supported on Windows 7 and Windows Embedded 7 (32-bit or 64-bit). This section provides the installation procedure on Windows Embedded 7.

1. Connect a monitor, keyboard, and a mouse to the DA-820 computer.
2. Turn on the DA-820 computer.
3. Obtain the MxPrpSetup.msi file on the DA-PRP-HSR Software CD/DVD or download the file from Moxa's support website at http://www.moxa.com/support/download_center.asp. Then, save the file on the DA-820 computer.
4. Double-click **MxPrpSetup.msi** to start the installation process.
5. In the Set Service Login dialog box, create a Windows service account for the Moxa PRP Service.
6. Enter the account username in the format [hostname/name] and specify the password.
7. Restart the computer to start using the Moxa PRP Service.

Configuring the DA-PRP-HSR

You can use the Moxa PRP Settings utility to set the operating mode on the DA-PRP-HSR.

1. Open the Moxa PRP Settings utility from the Start menu.
2. If more than one DA-PRP-HSR is installed in the computer, from the **Module Index** drop-down list, select the index (1 to 3) of the DA-PRP-HSR that you want to configure.
3. From the **PRP/HSR Mode** drop-down list, select an option and click **Apply**.
4. Restart the Moxa PRP Service or restart the computer to make the changes take effect.

Installing the MMS Device Manager

NOTE The MMS Device Manager is supported on Windows 7 and Windows Embedded 7 (32-bit or 64-bit).

For information on installing the MMS Device Manager, refer to the *DA-PRP-HSR Software Manual*.

LED Indicators

The following table describes the LEDs.

| LED Name | LED Color | LED Function |
|----------|-----------------|---|
| 1G_A | Yellow/Blinking | 1000 Mbps (Gigabit) Ethernet mode. |
| | Off | No link. |
| 100M_A | Green/Blinking | 100 Mbps Ethernet mode. |
| | Off | No link. |
| 1G_B | Yellow/Blinking | 1000 Mbps (Gigabit) Ethernet mode. |
| | Off | No link. |
| 100M_B | Green/Blinking | 100 Mbps Ethernet mode. |
| | Off | No link. |
| PRP | Green | The DA-PRP-HSR is operating in PRP mode. |
| HSR | Green | The DA-PRP-HSR is operating in HSR mode. |
| Fault | Red | The DA-PRP-HSR is not functioning properly. |



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