

What's new in PowerLogic™ PM5500 Firmware Ver. 2.7.4

This Document outlines the new and updated features in firmware Version 2.7.4 (V02.07.04) for the PowerLogic PM5560 and PM5563 meters.

Additional Information and resources

Visit www.schneider-electric.com to download the firmware upgrade files and related resources:

- The firmware upgrade files
- The latest version of ION Setup to support the new features (if applicable)
- The latest User manual, Datasheets and Installation sheets

1 DNP3

The DNP3 protocol support over Ethernet is available in firmware version 2.7.4 and above for PM5560, PM5563 and PM5563RD meter models. The Distributed Network Protocol Version 3.0 (DNP3) is a multipoint communication protocol which specifies the coding of data and rules for exchanging the data between a slave device and a master control device. DNP3 is an open protocol which can be implemented on any communication device. The DNP3 is available on Ethernet communication. The DNP3 protocol specifies the data that can be exchanged and the form in which they are transmitted.

1.1 DNP3 features overview

The meter can be integrated into a DNP network as a DNP slave (pre-configured for basic DNP slave functionality). The meter supports a maximum of three concurrent connections (sessions) using the DNP3 protocol.

DNP3 is disabled by default. You can modify the meter's default DNP3 settings using webpages and HMI. The data can be imported into the meter from a DNP control relay or an analog output device.

The primary objects of the DNP3 are as follows:

- Analog input
- Binary counter
- Binary Input

This feature can be enabled/disabled by navigating to the DNP3 settings available through the meter's display under Maint > Setup > Comm > Enet, or via the relevant section in the meter's web-page interface.

For more details on the DNP3 features in PM5500 Series, please refer to the PM5500 Series User Guide version 06 or later.

2 Support for PM5RD Hardware Ver. Bx on PM5563/PM5563RD with Firmware Ver. 2.7.4 and later

The firmware Ver. 2.7.4 brings support for PM5RD (Remote Display device) Hardware Ver. Bx on PM5563 and PM5563RD models and introduces the option to select appropriate Hardware version (Ax/Bx) of PM5RD for the PM5560/PM5563 models.

2.1 PM5RD Hardware version selection overview

PM5563, which is a din-rail mount device, supports connection to one Remote Display unit PM5RD, which is a panel mount device. PM5563RD is PM5563 & PM5RD devices in one package. PM5RD device may have one of below two Hardware (H/W) versions:

- H/W: Ax

or

- H/W: Bx

(x = number)

PM5563 running on firmware version older than v2.7.4 will only support PM5RD H/W Ver. Ax.

PM5563 with firmware v2.7.4 (factory-shipped or field-upgraded) can support PM5RD H/W Ver. Ax or Ver. Bx, provided the PM5563 is configured accordingly.

1. If the user has a PM5563 and is not using a PM5RD with it, they need not review or make any changes to configuration explained in below section.
2. If the user has a PM5563 connected to a PM5RD and the setup is already working, they need not review or make any changes to configuration explained in below section. This is applicable even after the user upgrades the PM5563 in this setup from a previous firmware version to v2.7.4.
3. If the user has a PM5563RD which includes PM5563 and PM5RD devices in one package, the PM5RD will work out-of-the-box with the PM5563 that came along with it in the same box.
4. If the user has a PM5563 device and wants to use a separately purchased PM5RD device with it, they must follow instructions in below section to configure the PM5563 so that the connected PM5RD works.

2.2 Configuring the PM5563 for PM5RD hardware version

This procedure is applicable to PM5563 product only

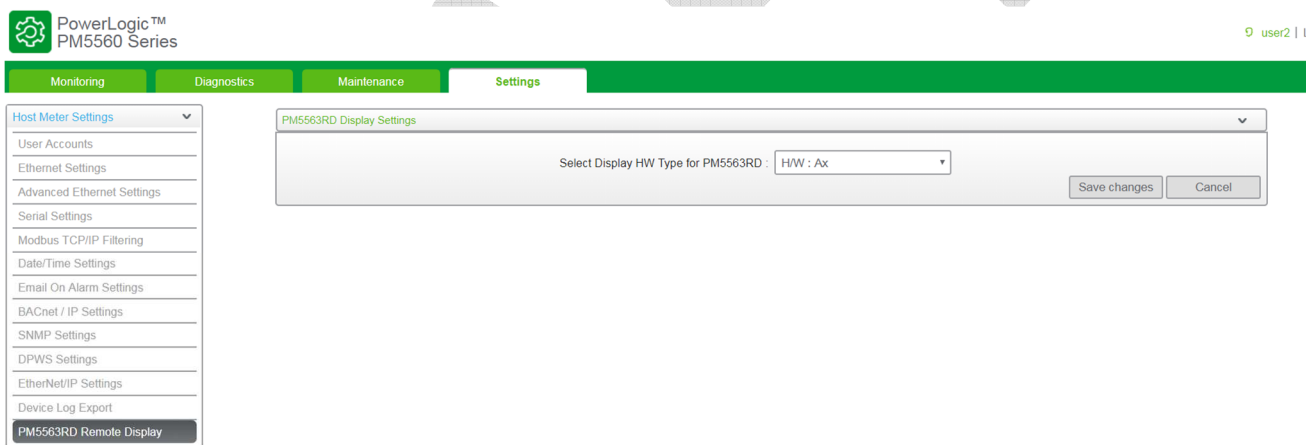
STEP 1: Connect the PM5RD to the PM5563 device, power-on the PM5563 device. At this point, if the PM5RD remote display is operating normally, you are not required to follow the instructions in this section until you choose to change the connected PM5RD to another unit. If the PM5RD connected does not display any content (the backlight may be on), proceed to next step

STEP 2: Connect to PM5563 via Ethernet, open the product's webpage and log in using appropriate credentials, navigate to Diagnostics > Meter Information. If the Firmware OS version is v2.7.4 or later, you may skip below step. However, it is recommended that you use the latest firmware version available.

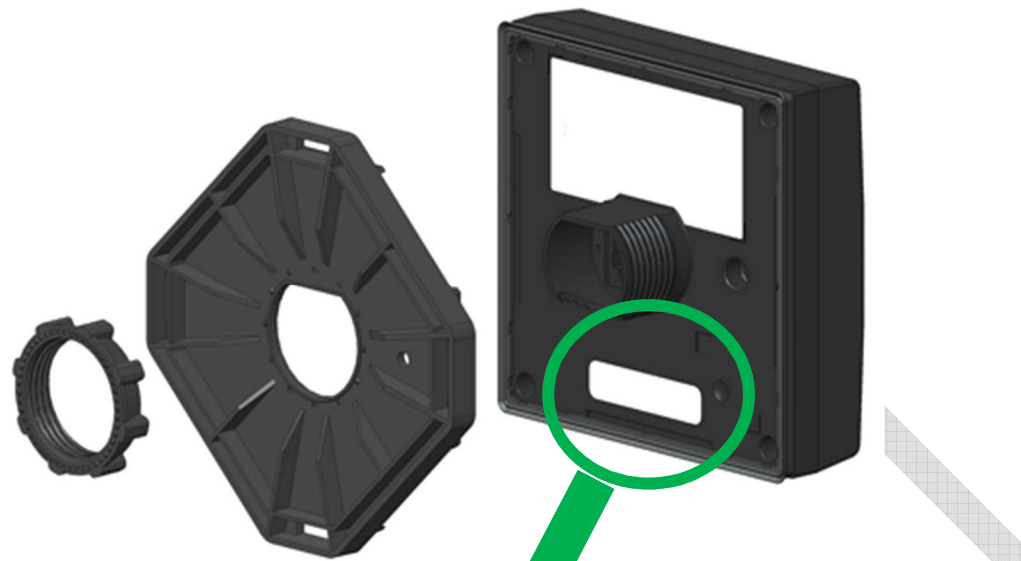
STEP 3: In the PM5500 User Guide, under chapter "Maintenance", refer the "Firmware Upgrades" section for procedure to upgrade PM5563 to latest firmware (v2.7.4 or later).

Following steps are applicable to PM5563 device running on firmware v2.7.4 and later.

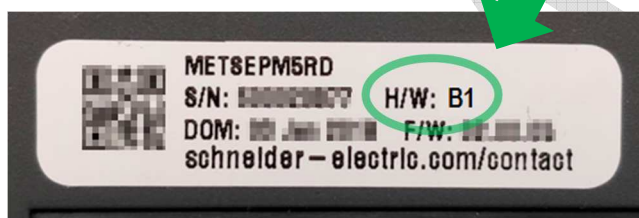
STEP 4: Open the product's webpage and navigate to Settings > PM5563RD Remote Display. The below screen should be visible, and the value displayed when this page is navigated to is the present configuration.



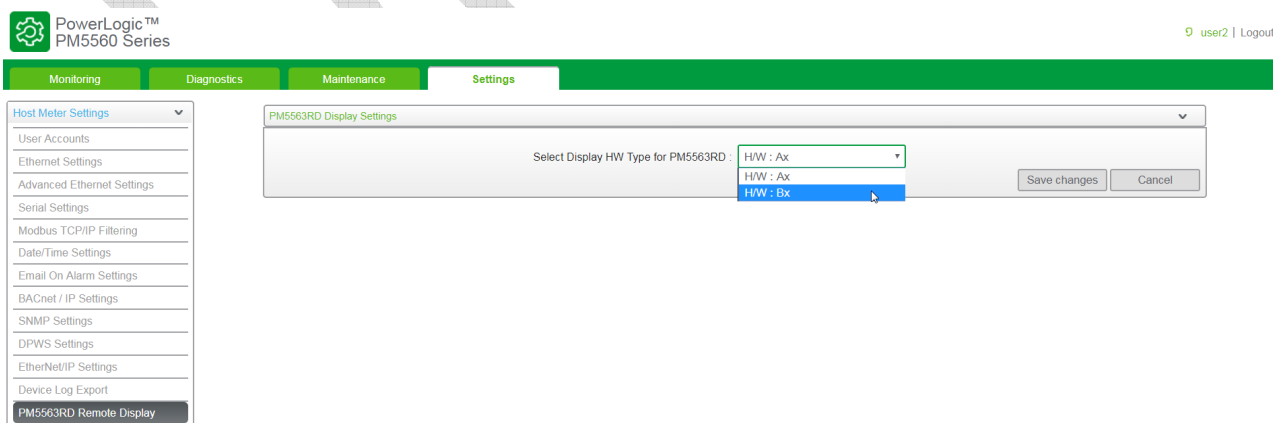
STEP 5: Note the H/W version printed on a label on the PM5RD, this label is located as illustrated below:



Example:



STEP 6: ON the PM5563 device's webpage, select the appropriate H/W as per the PM5RD device connected. If the PM5RD is not already connected, you should connect it to the PM5563 at this point.



STEP 7: When this configuration is changed, the PM5563's webpage will display a warning message. It will display another warning message before a changed configuration is saved. Make sure the changes done are as per instructions in the message. After making changes and saving the configuration, restart (auxiliary power-cycle) the PM5563 device for the connected PM5RD to function properly.

