RMC
Dysfunction using USB with IEC applications

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1 Introduction
A new issue in the USB connection to RMC devices could cause a reset.

2 Description
The purpose of this document is to list the work procedure to avoid the above scenario. The issue is applicable only for RMC devices installed with the following versions of production software.

- OS: 2105411-029 2.0.4-3
- Flash: 2105457-026 2.0.5-2

This document assumes that the following version of PCCU software is installed.
- PCCU: 2103445-085 Build 838

3 Recommended customer mitigation
The work around procedure depends on the usage and current configuration of the device. The following sections list usage and the correct solution for each example.

3.1 No IEC applications instantiated
The issue has been observed to occur only with instantiation of IEC applications, ABB recommends normal usage of the USB connection if no IEC applications have been instantiated.

- OS: 2105411-029 2.0.4-3
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3.2 With IEC applications instantiated
This work around procedure is needed if IEC applications are instantiated. The procedure in brief recommends using network connection to access the device and discourages using/connecting USB cable to the device until the devices are upgraded with a corrected version of the software.

3.2.1 Network connection is enabled, and IP addresses are configured
If the IP address of the device is already configured and is accessible via the network or direct ethernet connection to the computer, the network connection should be used to access the device (Entry mode, 32-bit loader, etc).

Use the following instructions if the unit already has a USB cable connected or had a USB connection after the last reset:

NOTICE – Equipment Damage or loss of data: If the device is installed in the field, follow your specific well shut down procedures before unplugging the power supply.

Do not connect (reconnect) the USB cable until the device is upgraded with a corrected version of the software.

1. To unplug the USB cable:
   a. Turn Off the RMC device by disconnecting the power supply and wait until the device completely shuts down.
   b. Un-plug the USB cable (if connected to the device) and re-connect the power supply.

3.2.2 If network connection is disabled or IP address is not configured.
1. Connect a USB cable between the computer and the device.
2. Connect to the entry mode (PCCU) of the device using the USB connection.
3. In the entry mode, select the Ethernet tab under the Communications field.
4. On the Ethernet tab, check the Enable Ethernet option and configure the IP settings. If using the static IP option, uncheck Enable DHCP option and enter the IP address, subnet mask and default gateway(optional) in the appropriate fields.
5. Click send.
6. If the DHCP option is needed, ensure the unit is connected to a network with a DHCP server.
   a. Check Enable DHCP option
   b. Click send. This will auto populate network fields. Make a note of the IP address of the device.
7. The device must be restarted for the ethernet settings to be functional

**NOTICE – Equipment Damage or loss of data:** If the device is installed in the field, follow your specific well shut down procedures before restarting the device.

Do not connect (reconnect) the USB cable until the device is upgraded with a corrected version of the software.

8. Select the **Station Setup** tab under Station ID field.
9. Choose **Yes** for **System Shutdown / then Reset**
10. Click **send**. This will reset the device. Close the PCCU connection.

11. After the unit has rebooted, ensure the device is accessible with the IP address. Connect to the entry mode (PCCU) of the device using ethernet connection and ensure it is successful. Close the PCCU connection.

12. To unplug the USB cable:
   a. Turn Off the RMC device by disconnecting the power supply and wait until the device completely shuts down.
   b. Un-plug the USB cable (if connected to the device) and re-connect the power supply