

ABB MEASUREMENT & ANALYTICS | TECHNICAL BULLETIN | 2106259TB-TB210

# RMC Dysfunction using USB with IEC applications

April 25, 2019

# **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

Flash - 2105457-026 2.0.5-2

## 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.
- 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.

PCCU32 - [Entry]			- 🗆 🛛
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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.

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Station Se	etin entirational iconce Management Ration	Information Resources System Log Security Log Registry	
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	Description	Value	
0.0.4		TOTALFLOW	
0.0.5		Measurement and Control	
0.9.0	Date/Time	04/17/2019 10:00:48	
0.9.0		No	
	Security		
0.0.6	Security Code Level 1		
0.0.7			
0.7.3	Security Switch Status	on	
	Configuration for Low Power Use		
0.10.2	Remote Comm Cutoff Voltage	11.90	
0.10.3	Sleep Mode Entry Voltage	10.90	
0.8.8	Sleep Mode Hold-off Time (sec)	120	
0.9.11	Wake Up Time	02:00:00	
0.7.14	Wake Up Time Mode	Time from Start of Sleep	
	Lithium Battery Status		
0.7.10	Lithium Battery Status	ОК	
	Low Charger Alarm Enable		
	Low Charger Alarm	Enabled	
0.7.0	Low Charger Alarm State	Not in Alarm	
	Backup		
0.21.0	Update Cold Start Configuration	No Operation	
	System Startup/Shutdown		
	Last System Boot Date/Time	04/17/19 09:59:49	
	System Shutdown	No	
0.7.5	System Shutdown / then Reset	Yes	
	Warm Start Status		
Re-re	ad Monitor	Print Screen Save	Send Close

- 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



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