



GRL Platform Solutions

User Guide

Short Circuit Fixture (GRL-C3-MPP-EXT)

This material is provided as a reference to set up and use the GRL-C3-MPP-EXT short circuit test fixture with the GRL Platform Solutions WPC Qi2 Wireless Charging Power Transmitter [PTx] Tester (GRL-C3-MP-TPR) Hardware via the GRL-C3-MP-TPR Automation Test Application.

For software support, contact support@grlps.com.

Published on 21 May 2026

DISCLAIMER

This document is provided “as is” with no warranties whatsoever, including any warranty of merchantability, no infringement, fitness for any particular purpose, or any warranty otherwise arising out of any proposal, specification, or sample. The GRL Platform Solutions disclaims all liability for infringement of proprietary rights, relating to use of information in this specification. No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted herein.

All product names are trademarks, registered trademarks, or service marks of their respective owners.



Copyright © 2026 GRL Platform Solutions. All rights reserved.

TABLE OF CONTENTS

1	SCOPE OF THIS USER GUIDE	5
2	INITIAL CONNECTION SETUP	5
3	UPDATE GRL-C3-MPP-EXT FIXTURE FIRMWARE	7
4	PERFORM SHORT CIRCUIT TESTS	8

LIST OF FIGURES

Figure 2.1: Initial GRL-C3-MPP-EXT Connection Setup.....	5
Figure 2.2: Front View	6
Figure 2.3: Rear View.....	6
Figure 3.1: Update GRL-C3-MPP-EXT Firmware- #1.....	7
Figure 3.2: Update GRL-C3-MPP-EXT Firmware- #2	7
Figure 3.3: Update GRL-C3-MPP-EXT Firmware- #3	7
Figure 4.1: GRL-C3-MPP-EXT Fixture LED Turns Green After Successfully Connected to Tester	8
Figure 4.2: GRL-C3-MP-TPR App Desktop Shortcut	8
Figure 4.3: Test Configuration Screen.....	9
Figure 4.4: Create New Project.....	9
Figure 4.5: Create New Project— #1.....	9
Figure 4.6: Create New Project— #2	10
Figure 4.7: Select Short Circuit Test Cases	10
Figure 4.8: Short Circuit Test Run In Progress	11
Figure 4.9: GRL-C3-MPP-EXT Fixture LED Blinks Red During Shorting.....	11

1 Scope of this User Guide

This User Guide describes how to connect and set up the GRL-C3-MPP-EXT short circuit test fixture with the GRL-C3-MP-TPR WPC Qi2 Wireless Charging Power Transmitter (PTx) Tester Hardware to perform automated short circuit power tests using the GRL-C3-MP-TPR Test Application.

Note: For details on how to get started with the GRL-C3-MP-TPR tester hardware and App, refer to the GRL-C3-MP-TPR user documentation in <http://grlps.com/download-center/>.

2 Initial Connection Setup

Below image shows the initial hardware setup for the GRL-C3-MPP-EXT fixture.



FIGURE 2.1: INITIAL GRL-C3-MPP-EXT CONNECTION SETUP

The following procedure describes how to connect the GRL-C3-MPP-EXT short circuit test fixture to the GRL-C3-MP-TPR tester hardware and receiver coil.

1. Make sure the GRL-C3-MP-TPR tester hardware is powered off.
2. Connect the GRL-C3-MPP-EXT fixture to the GRL-C3-MP-TPR tester hardware as shown in Figure 2.2 and Figure 2.3 below.
3. Connect the receiver coil to the GRL-C3-MPP-EXT fixture.

4. Connect the GRL-C3-MPP-EXT fixture to the GRL-C3-MP-TPR tester hardware using the SMA cable provided.

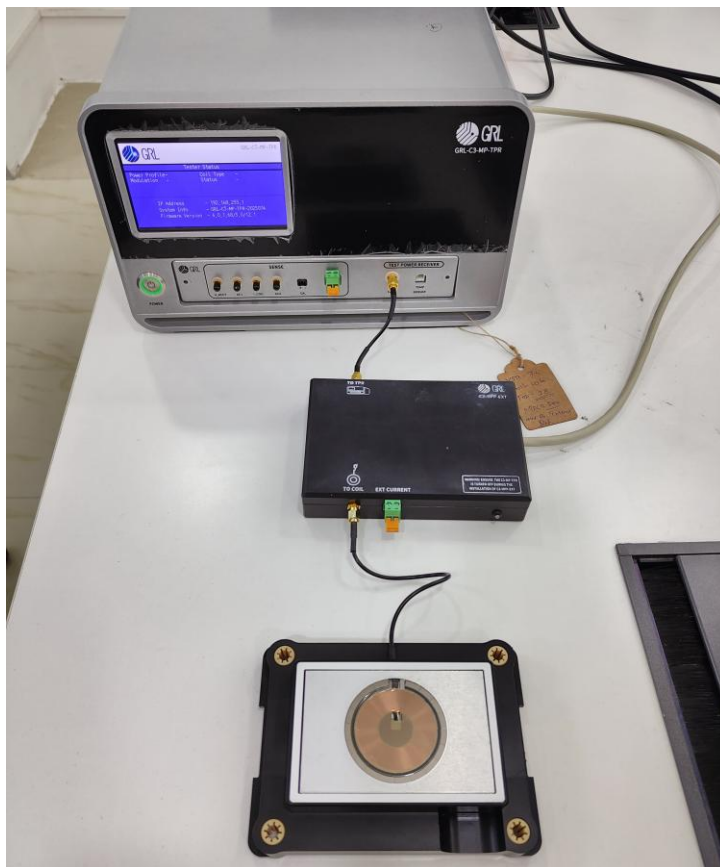


FIGURE 2.2: FRONT VIEW



FIGURE 2.3: REAR VIEW

3 Update GRL-C3-MPP-EXT Fixture Firmware

Follow the steps below to perform firmware update for the GRL-C3-MPP-EXT fixture:

1. Click on the **Update Short Fixture FW** button as indicated in Figure 3.1.

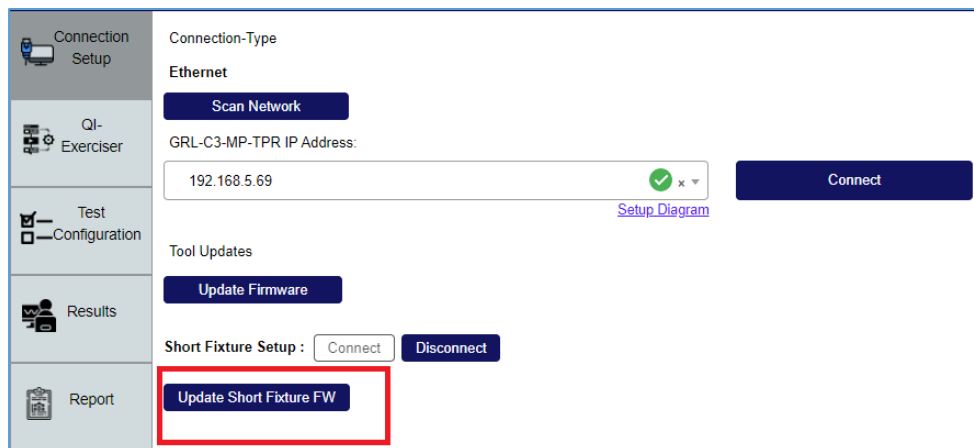


FIGURE 3.1: UPDATE GRL-C3-MPP-EXT FIRMWARE- #1

2. The following pop-up message will appear as shown in Figure 3.2 below. Click "Cancel" to proceed with firmware update for the GRL-C3-MPP-EXT fixture.

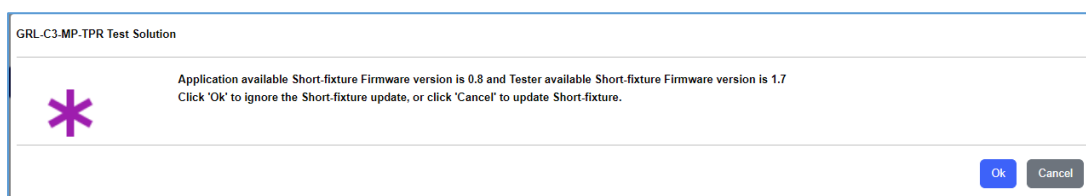


FIGURE 3.2: UPDATE GRL-C3-MPP-EXT FIRMWARE- #2

3. The firmware update process will start and may take a few minutes to complete (Figure 3.3 below).

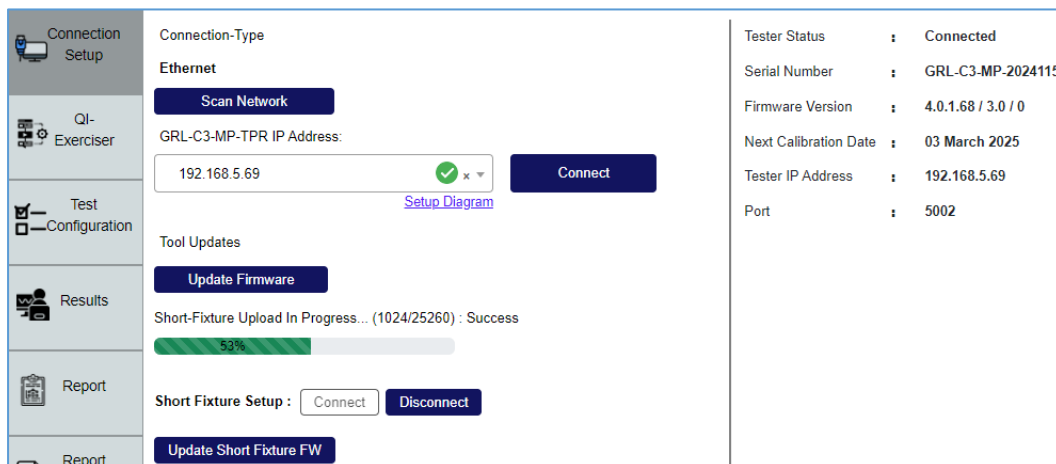


FIGURE 3.3: UPDATE GRL-C3-MPP-EXT FIRMWARE- #3

4 Perform Short Circuit Tests

1. Connect the GRL-C3-MPP-EXT short circuit fixture to the GRL-C3-MP-TPR tester hardware as described in Section 2, *Initial Connection Setup*.
2. Power up the GRL-C3-MP-TPR tester hardware and observe that the LED indicator on the GRL-C3-MPP-EXT fixture should turn green as shown in Figure 4.1 below. The fixture is now ready to be used with the tester hardware.



FIGURE 4.1: GRL-C3-MPP-EXT FIXTURE LED TURNS GREEN AFTER SUCCESSFULLY CONNECTED TO TESTER

3. From the desktop, open the GRL-C3-MP-TPR App by double-clicking on the “GRL-C3-MP-TPR” App desktop shortcut:

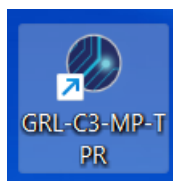


FIGURE 4.2: GRL-C3-MP-TPR APP DESKTOP SHORTCUT

4. Click on the **Test Configuration** tab on the left-side bar of the application as shown in Figure 4.3 below.

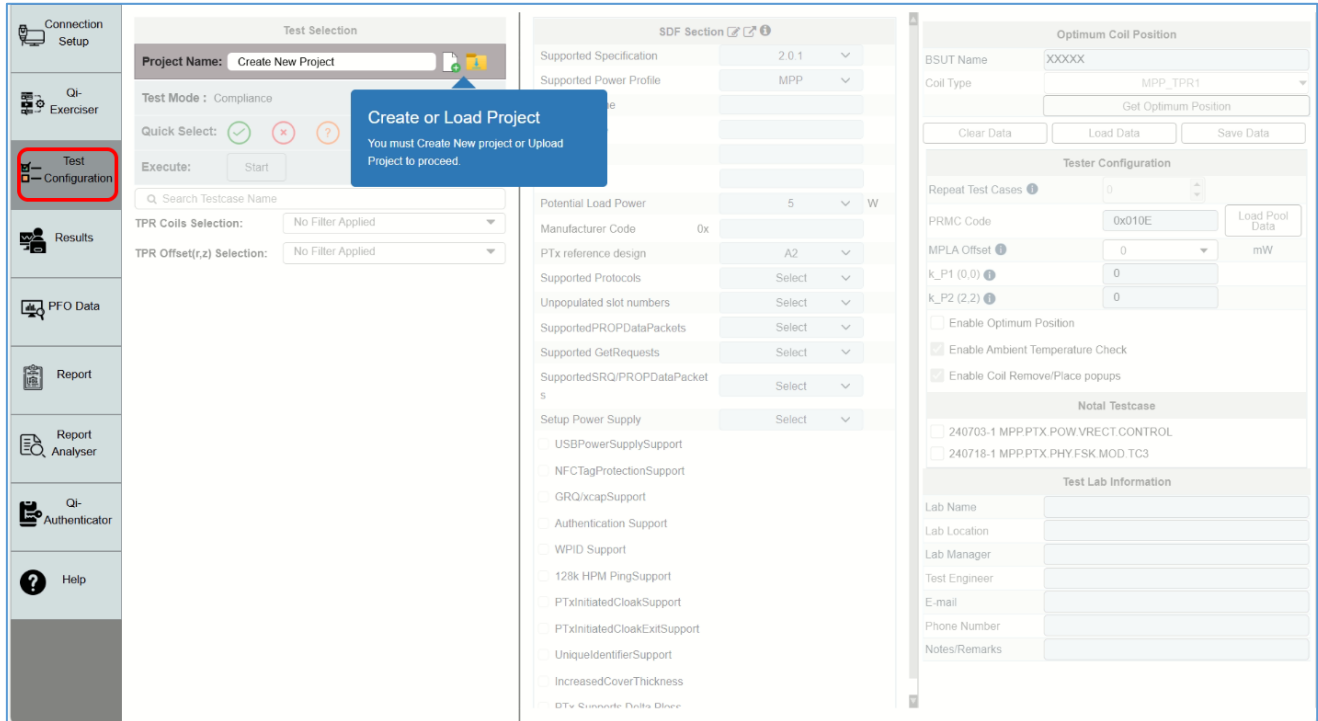


FIGURE 4.3: TEST CONFIGURATION SCREEN

5. Create a new Project by clicking on the Project Name entry field or Create New Project icon as shown in Figure 4.4 below.

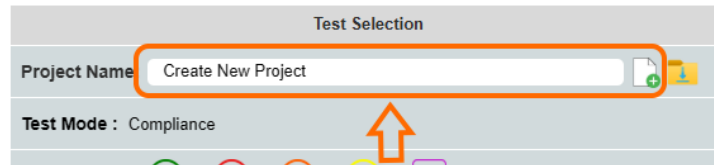


FIGURE 4.4: CREATE NEW PROJECT

6. Enter the **Project Name** (allowed up to 15 letters and special characters) and select the **Test Mode** as “Compliance”.

Note: Select the “Compliance” test mode if the eSDF (Electronic Self Declaration Form) file of the DUT is available. If the eSDF is not available, select the “Pre-Compliance” test mode.

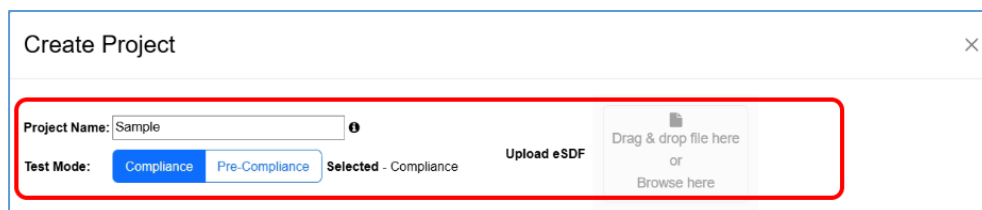


FIGURE 4.5: CREATE NEW PROJECT— #1

7. **Upload** the **eSDF** file of the DUT by dragging and dropping the file into the panel on the right or clicking on the panel to select the file from the system. Then click on the **Create Project** button at the bottom.

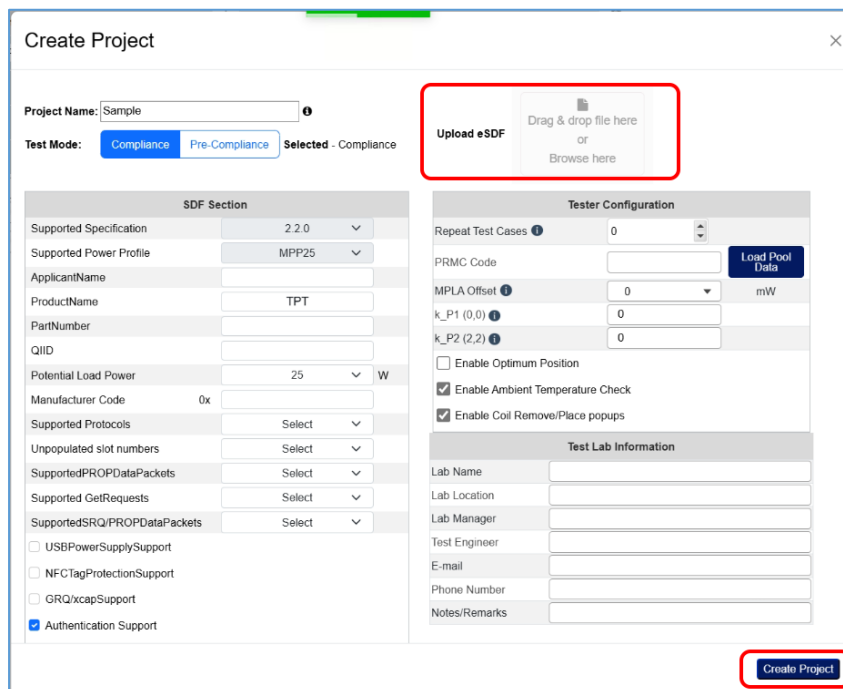


FIGURE 4.6: CREATE NEW PROJECT— #2

8. Select the “OCP Test cases” from the test list as indicated in Figure 4.7 below.

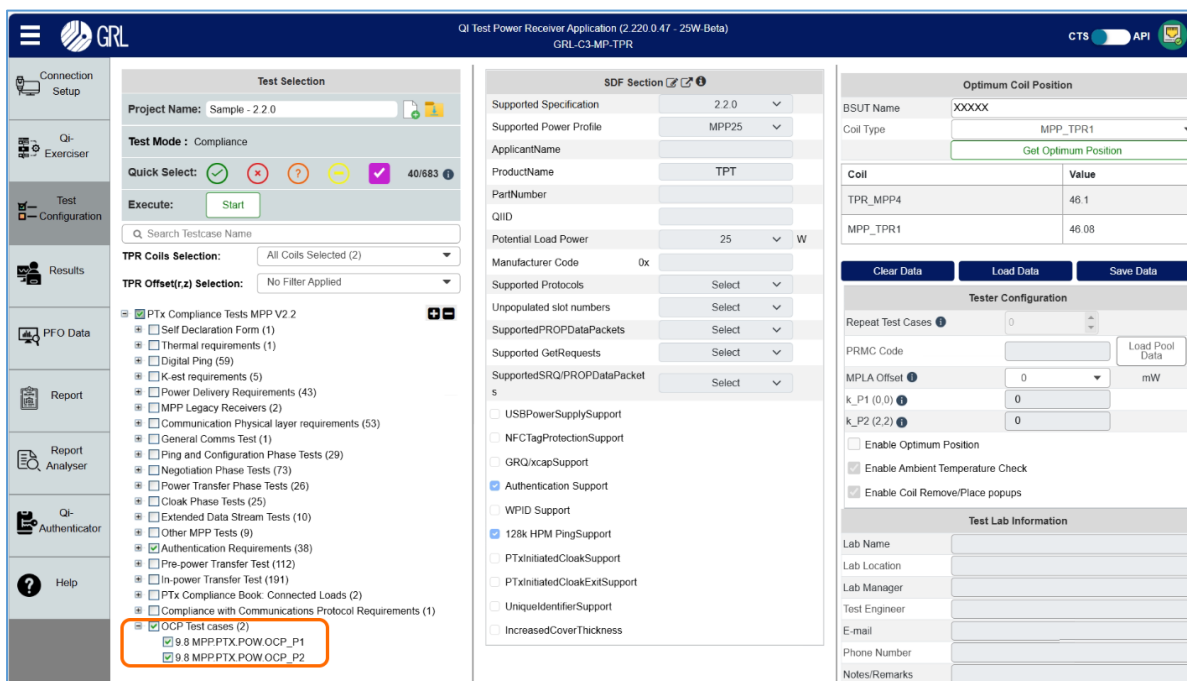


FIGURE 4.7: SELECT SHORT CIRCUIT TEST CASES

9. Click on the **Start** button to run the short circuit tests. The test run can be viewed on the “Results” screen as shown in Figure 4.8 below.



FIGURE 4.8: SHORT CIRCUIT TEST RUN IN PROGRESS

8. Once the short command is executed, read the short circuit current from the Results screen. During the shorting process, observe that the LED indicator on the GRL-C3-MPP-EXT fixture should turn red and blinking as shown in Figure 4.9 below.



FIGURE 4.9: GRL-C3-MPP-EXT FIXTURE LED BLINKS RED DURING SHORTING

9. Once done, power off the GRL-C3-MP-TPR tester hardware before disconnecting the GRL-C3-MPP-EXT fixture.

Note: If the GRL-C3-MPP-EXT fixture is not connected to the GRL-C3-MP-TPR tester hardware, the following pop-up message will appear:



CAUTION: Do not connect or disconnect the GRL-C3-MPP-EXT fixture from the GRL-C3-MP-TPR tester hardware while it is powered on. Ensure that the power is turned off before making any connections.

END_OF_DOCUMENT