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Model C5003B PowerView CP Portable TRU User Manual







Scope

This User Manual provides the user with the basics to getting up and running with the PowerView Model C5003B Portable TRU.

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Revision	Date	Description
1	19/5/22	Initial Release



1 General Description



The Powerview Model C5003B CP Portable TRU provides up to 20 x 12V 1.5A individually controllable outputs and 15 reference inputs in a ruggedised portable case equipped with a local user friendly touchscreen and full remote monitoring and control via the Powerview CP website.

The 20 TR outputs can be paralleled in groups of 2 or four to provide higher current outputs circuits:

2 Locating the Unit on Site

The Model C5003B is designed to be used in harsh environments but care should still be taken to ensure that the unit continues to perform satisfactorily. Please follow these basic guidelines:

- This unit contains power supplies which do cause heat, and so the unit should be kept in a cool spot to prevent over-heating
- Although the portable TRU is in a water resistant plastic case, the case does have ventilation grids on the bottom, so care should be taken to keep it dry.



GENERAL WARNINGS

CAUTION

When operating the unit on AC power, always keep all AC cables and connections from coming into contact with water or getting wet. This can be dangerous to humans and can cause the unit to fail.



Do not leave the portable TRU exposed to direct sunlight. This can cause the unit to overheat and shutdown.



Do not place the unit in sand or loose debris that could block the vents on the bottom of the unit. The unit relies on the ventilation through the bottom of the unit to keep cool.



Do not leave the unit where water can pool around it. While the portable TRU is in a water resistant plastic case, the case does have ventilation grids on the bottom through water can enter.

3 Connections

3.1 TR Output Connections

You will find the connections for the outputs on the left hand side of the unit.



Power Output connections

Connect anodes to Terminal Block A, terminals A1 to A20, and structure returns to terminals B1 to B10 at the top of Terminal Block B.

Note that depending upon how your unit is configured, there may be links inserted into the anode terminals to combine adjacent outputs to create a smaller number of higher current outputs. Do not remove these bridges without consulting Omniflex for more details about configuring your unit for your application.



3.2 Reference Connections

Connect References 1 to 15 to Ref Input Terminals C1 to C15 respectively. Reference returns are commoned on terminals C16 to C20.



Reference Input Connections

4 Powering ON

1. Connect the mains cable to the AC Input Plug. Plug the cable into a standard GPO:



AC Input Connector

- 2. Turn the "AC ON" switch ON The green AC LED will come ON.
- 3. Turn the "BATT/AC Select" to AC The TRU will switch ON.
- 4. Turn the screen ON with the "Screen ON/OFF" switch.





Power On Controls

5. Turn the screen ON with the "Screen ON/OFF" switch.



Touch Screen On/Off control

- 6. The screen has a screen saved function. After a few minutes without being touched the screen display will turn itself off. (The unit will continue to function normally. Give the screen a firm tap to turn it back on.
- 7. When running the portable TRU on batteries, always turnoff the touch screen using the switch shown in the figure above to conserve power and get the longest life from your batteries before requiring recharging.

5 Touch Screen Operation

The Model C5003B portable TRU is operated through a touch screen inside the lif of the case.

Full operating instructions for the unit through the touch screen are given in a separate User Manual:

"Touch Screen Version 5.5 User Manual" available in pdf as file UMCPTS55R01.pdf



6 Configuring the Unit with paralleled outputs for high current

The 20 TR outputs can be paralleled in groups of 2 or four to provide higher current outputs circuits. The following table shows typical examples of the various options that can be achieved:

Outputs	Example 1 20 x 1.5Amps	Example 2 5 x 6Amps	Example 3 10 x 3Amps	Example 4 3 x 6Amps, 4 x 3Amps	Example 5 2 x 6Amps, 12 x 1.5Amps
1	1 x 1.5A	၂ 1 x 6A	1 ¹ × 3A	1 ¹ x 6A	η ^{1 x 6A}
2	1 x 1.5A	-		-	
3	1 x 1.5A		1 x 3A		
4	1 x 1.5A				
5	1 x 1.5A	η ^{1 x 6Α}	1 x 3A	<mark>д</mark> 1 х 6А	<mark>ј ¹х6А</mark>
6	1 x 1.5A	-			
7	1 x 1.5A	-	1 x 3A		
8	1 x 1.5A				
9	1 x 1.5A	7 1 x 6A	1 x 3A	<mark>д</mark> ^{1 х 6А}	1 x 1.5A
10	1 x 1.5A	-			1 x 1.5A
11	1 x 1.5A	-	1 x 3A		1 x 1.5A
12	1 x 1.5A				1 x 1.5A
13	1 x 1.5A	T 1 x 6A	1 x 3A	1 1 x 3A	1 x 1.5A
14	1 x 1.5A	_			1 x 1.5A
15	1 x 1.5A	-	1 x 3A	1 × 3A	1 x 1.5A
16	1 x 1.5A				1 x 1.5A
17	1 x 1.5A	1 x 6A	1 x 3A	1 x 3A	1 x 1.5A
18	1 x 1.5A	-			1 x 1.5A
19	1 x 1.5A	-	1 1 x 3A	1 × 3A	1 x 1.5A
20	1 x 1.5A				1 x 1.5A

The procedure to change the configuration involves the following:

- 1. Linking the correct zone outputs on the terminals
- 2. Reconfiguring the T/R modules inside the portable TRU for revised output configuration.
- 3. Modification of the web portal to match the new configuration.

This procedure is outside the scope of this manual, If you wish to modify the configuration of your portable TRU for a different number of outputs, please consult Omniflex, who can assist you to accomplish this.

7 Website Remote Monitoring

The Model C5003B is compatible with the PowerView CP web portal and will continue to log data to the cloud during operation. Omniflex will set up login facility for each portable TRU prior to delivery.



7.1 Web Portal Login

Please consult Omniflex for login credentials for the unit supplied to you.

7.2 How to Register for Alarms

The portable TRU can be set to send alarm to the web portal on a whole range of conditions such as:

- Loss of power
- TR output currents dropping below a set value.
- Reference readings exceeding set limits.

Please consult Omniflex to have the web portal configured with the alarms and recipients that your require.

8 Technical Support

Lifetime technical support for all Omniflex products is available by email on <u>techsupport@omniflex.com</u>. Alternatively you can contact your nearest Omniflex office of account executive for personal assistance.



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