IPM500 Frequently Asked Questions





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1. Where can I find the wiring guide for my display?

See "Setup/Connections" on page 2 in the QuickStart Manual or for a more thorough guide, see "Connector Wiring Information" starting on page 4 in the Product Manual.

2. What do the buttons on the display do?

See "**Display Buttons**" on page 3 in the QuickStart Manual or for a more thorough guide, see "**Front Panel Setup Keys**" on page 9 in the Product Manual.

3. What does each menu item do?

See "**Menu Functions**" on page 3 in the QuickStart Manual or for a more thorough guide, see "**Setup Menu**" starting on page 11 in the Product Manual.

4. How do I change the numbers in the menu functions?

- **a.** Press the **Peak** button when you are at the menu setting that you would like to change the numerical value of (**ConFG**, **InPut**, **SetuP**, **SCALE**, etc...). The display will flash a five digit number.
- **b.** Press **Peak** to choose the placement of the digit you are going to change. The digit that will be changed will start flashing.
- c. Use the Reset button to increment the value of the flashing digit.Continue using the Peak button to choose the digit and the Reset button to change the value of the digit until your desired value is entered in the display.
- **d.** Press the **Menu** button to store your value and return you to the main menu.

5. What are FUTEK's default settings?

InPut	Strn 20.0
SEtuP	00_15
ConFG	020_0
FiLtr	11100
deC.Pt	dddd.d
Lo In	00.000
Lo rd	0000.0
*Hi In	20.000
*Hi rd	2000.0
ALSET	00040
AnSET	11

An Lo	0000.0	
An Hi	2000.0	
SEr 1	151	
SEr 2	0011	
SEr 3	00000	
SEr 4	000	
-GAin	00.000	
Loc 1	00000	
Loc 2	00000	
Loc 3	00000	
*See label on instrument for calibration settings		

For more details, see "Futek's Recommended Method for Configuration" on page 4 in the QuickStart Manual.

- What are the options in the "Setup" Menu? See "Meter Setup" on page 13 in the Product Manual.
- What are the options in the "Filter" Menu? See "Filtering" on page 14 in the Product Manual.
- What are the options in the "Lock" Menu? See "Loc 1, Loc2, Loc 3" on page 20 in the Product Manual or "Menu Locks" on page 10 in the QuickStart Manual.
- What are the options in the "Configuration" Menu? See "Meter Configuration" on page 14 in the Product Manual.
- 10. What are the options in the "Serial Interface Setup" Menu? See "Serial Interface Setup" starting at the bottom of page 17 in the Product Manual.
- 11. What are the options in the "Alarms" Menu? See "Alarm Output" on page 8 in the QuickStart Manual, and "ALSET" starting at the bottom of page 15 in the Product Manual.

12. What are the options in the "Analog Output" Menu?

See "Analog Output" on page 7 in the QuickStart Manual, and "An Set, An Lo, An Hi" on page 17 in the Product Manual.

13. How do I set up the display so it automatically calculates the scale factor and offset?

See "**Instructions for Configuration**, **Method 3**" on page 6 in the QuickStart Manual.

14. How do I configure the Menu Lockout, Input Range, and Excitation Voltage jumpers?

See "Internal Jumpers" on page 11, 12, and 13 in the QuickStart Manual.

15. What is the wiring code and setup option for TEDS?

Upon power up, the TEDS enabled IPM500 will display a sequence of "3333", "2222", and "1111" followed by the firmware revision, alerting the user of TEDS capability. Ensure that the proper connections are made from pins 5 and 6 of the TEDS connector to the DB-9 converter PCB before plugging in a TEDS enabled sensor. Once the sensor is connected, the IPM500 will display the manufacturer's ID, and TEDS template number followed by an automatic reset. If the sensor contains IPM500 analog output or decimal point settings, then the display will automatically configure these settings.

See "**TEDS Interface**" on page 6 and 44 in the Product Manual for the wiring code, and Menu Settings, respectively.

16. How come the software I use is not compatible with the IPM500?

* RTS line may have to be disconnected for certain software applications. RTS pin cannot be disconnected if using USB line. RTS line must be un-asserted through software for normal USB operation. Please see your software manual on how to do this. If software does not allow un-assertion of RTS line you must use RS232 without RTS connected. The IPM500 Software uses RTS to gain control of TEDS card.

See "**TEDS Interface**" on page 6 and 44 in the Product Manual for the wiring code, and Menu Settings, respectively.

17. Is the new analog output card (GOD00228) compatible with my display?

The new analog output card works with the main display board if it has a revision of DPM2R or later. The revision number can be found on the chip on the main board that the other cards plug into (see image below). The revision numbering system for this card is DPM2x. The last digit goes from A-Z and then it starts with DPM2Ax with the last digit going from A-Z again. i.e. DPM2R, DPM2S...DPM2Z, DPM2AA, DPM2AB... The picture below is of a version that would be compatible with the new analog output card.



Figure 1

18. How do I convert the units on my IPM500?

By default, the IPM500 is set to display the value in lbs if it is mated with a load cell. To change the units, follow the instructions below:

- a. Press Menu until dEC.Pt is displayed.
- **b.** Press **Peak** to enter the submenu.
- **c.** Press **Reset** to move the decimal point and change it to the desired decimal place.
- **d.** Press **Menu** to store the value. Continue to press **Menu** until **Hi Rd** is displayed.
- e. Change the value stored to its equivalent value in the units desired. Ex. If the value stored was 500 (lb), then replace it with 2224 (N).

Feel free to use FUTEK's Conversion Calculator here: <u>http://www.futek.com/conversion.aspx</u>

19. What do I connect to the sense lines?

If your sensor has only 4 wires instead of 6 wires, pins 1 and 2 can be jumpered together and pins 5 and 6 can be jumpered together.



20. Why are the digits on my display flashing?

There may be two reasons why the digits on the IPM500 are flashing.

- a. The digits can flash random numbers if the connection to the sensor is open.
- b. They can also flash if the maximum value of the display is passed. (value displayed > 99999)

Check the following points to troubleshoot your system:

- 1. Check the wiring from the sensor to the IPM500.
- 2. Confirm the calibration values in the IPM500.
- 3. Confirm the output of the sensor after it is disconnected from the IPM500. This will verify if the sensor is working properly.