MudWatt Microbial Fuel Cell
- *Data Log* -

On behalf of the Keego Community, we thank you for taking part in the development of this exciting technology.

We have provided you with this booklet to help you gage your progress as you run your MudWatt MFC. The tables on the following pages may be used to record your data as you perform "sweeps" and "runs".

Instructions on performing sweeps and determining power output can be found in the User Guide included with your MFC.

Thanks again for participating. If you have any questions, please do not hesitate to contact us for assistance at support@keegotech.com.

Date:		
Temperature:		
Resistance (Ω)	Voltage (V)	Power (µW)
100		
500		
1k		
5k		
10k		

Date:		
Temperature:		
Resistance (Ω)	Voltage (V)	Power (µW)
100		
500		
1k		
5k		
10k		

Based on existing data, we've established the following benchmarks for continuous MFC power generation (lasting more than one (1) week):

<30 µW: Something is amiss. Please contact us for assistance at support@keegotech.com and describe how you prepared your MFC.

31-79 µW: Good. Your ingredients are on par with standard Boston topsoil.

80-199 µW: Great! Your microbes really like the ingredients in your MFC.

>200 µW: Terrific!! Your ingredients are superb and your microbes are very happy! Please contact us at data@keegotech.com and describe how you prepared your MFC.

Tips:
• Power (µW) = (Voltage (V))^2/(Resistance (Ω) X 1,000,000)
• Remember to turn off the blinker whenever taking measurements from your MFC.
• Turn two resistors on to achieve lower resistances. $(1/R_f=1/R_1+1/R_2)$

Date:		
Temperature:		
Resistance (Ω)	Voltage (V)	Power (µW)
100		
500		
1k		
5k		
10k		

Date:		
Temperature:		
Resistance (Ω)	Voltage (V)	Power (µW)
100		
500		
1k		
5k		
10k		

Date:

Temperature:

Resistance (Ω)	Voltage (V)	Power (µW)
100		
500		
1k		
5k		
10k		

Date:

Temperature:

Resistance (Ω)	Voltage (V)	Power (µW)
100		
500		
1k		
5k		
10k		

Run Sheets

Date & Time	Temperature (°C)	Resistance (Ω)	Voltage (V)	Power (µW)

Date:

Temperature:

Resistance (Ω)	Voltage (V)	Power (µW)
100		
500		
1k		
5k		
10k		

Date:

Temperature:

Resistance (Ω)	Voltage (V)	Power (µW)
100		
500		
1k		
5k		
10k		

Sweep Data Sheets

Date:

Temperature:

Resistance (Ω)	Voltage (V)	Power (µW)
100		
500		
1k		
5k		
10k		

Date:

Temperature:

Resistance (Ω)	Voltage (V)	Power (µW)
100		
500		
1k		
5k		
10k		

Date & Time	Temperature (°C)	Resistance (Ω)	Voltage (V)	Power (µW)

Date:		
Temperature:		
Resistance (Ω)	Voltage (V)	Power (µW)
100		
500		
1k		
5k		
10k		

Date:		
Temperature:		
Resistance (Ω)	Voltage (V)	Power (µW)
100		
500		
1k		
5k		
10k		

Date:		
Temperature:		
Resistance (Ω)	Voltage (V)	Power (µW)
100		
500		
1k		
5k		
10k		

Date:		
Temperature:		
Resistance (Ω)	Voltage (V)	Power (µW)
100		
500		
1k		
5k		
10k		

Date:		
Temperature:		
Resistance (Ω)	Voltage (V)	Power (µW)
100		
500		
1k		
5k		
10k		

Date:		
Temperature:		
Resistance (Ω)	Voltage (V)	Power (µW)
100		
500		
1k		
5k		
10k		