

Configuring the 850 and 890 Products to use 0.1 Degree Resolution Mode  
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On the all 890 and 850 products except the original 890 (no suffix) and 890B, the temperature controllers for Cell, Anode, and Cathode on the front panel of the instrument can be reprogrammed for 0.1 degree resolution. This is done by holding the Up and Enter keys on the controller for 5 seconds to enter Secure mode, then press Index to scan to the "dPt" parameter. Select "0.0" using the Up and Down keys, press Enter, then press Index to scan back to the main menu. See the Love/Dwyer 32A controller documentation for more details. No software configuration is needed.

To allow an external cell controller (not on the front panel of 890 or 850) to be used in 0.1 degree resolution mode, add the CellDecimal=1 line to the "fuelcell.ini" file as shown below. This will also work with the internal or external controllers of an 890 or 890B. This will tell the software that the controller is using the 0.0 mode. Unfortunately this cannot be done automatically.

```
[RS485]  
CellAddress=39  
CellDecimal=1
```

The external temperature followers actually support 0.1 degree settings, but there are no settings in the Configuration screens. The temperature follower section of the "fuelcell.ini" file looks like this

```
[TempFollow]  
  
1=35 0 1 1 0
```

where

35= address of the follower controller  
0= follow cell (1=follow anode, 2=follow cathode)  
1 = multiplier  
1= offset (in this example, temp = cell\*1 + 1)  
0 = decimal setting (0= 1 degree, 1= 0.1 degree)

If the last setting is 1, the transmitted setpoints are multiplied x10. If the controller has been reprogrammed as described above, the correct temperature will be set since the decimal point has moved.