

Adding customer defined Temperature Sensors

September 14, 2023

how to use custom sensor

Some DMM Models added an ability to create a custom temperature sensor in a firmware update.

Here is a summary for creating that sensor data on a SDM3055-SC

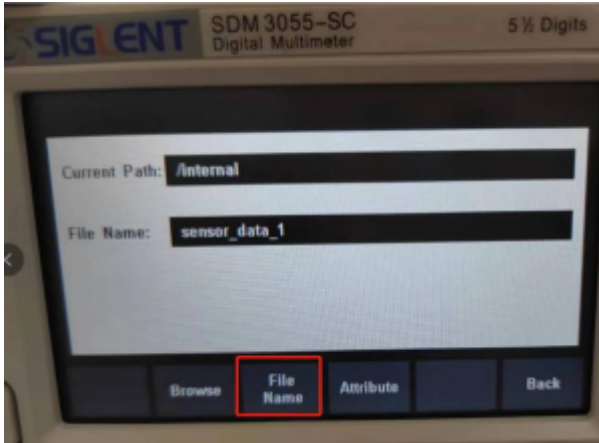
1. Turn on the temperature measurement function of the multimeter.
2. Turn on custom sensor options.



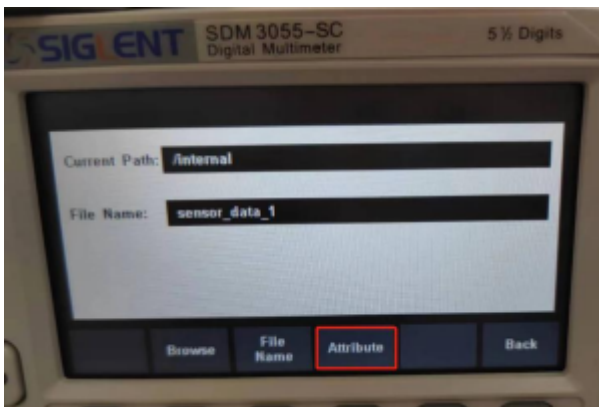
3. Create a sensor by yourself.
(1) Click 'New' to create a new sensor file.



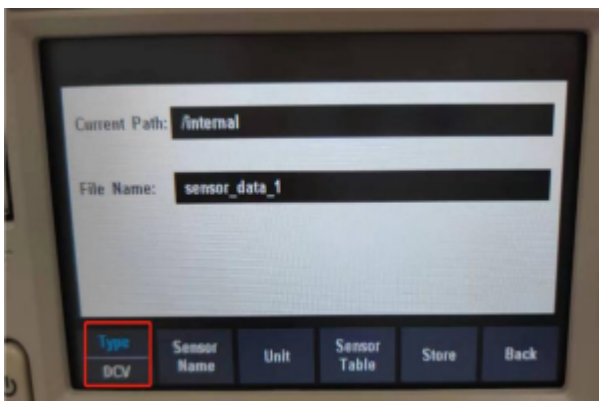
- (2) Click 'file name' to modify the file name.



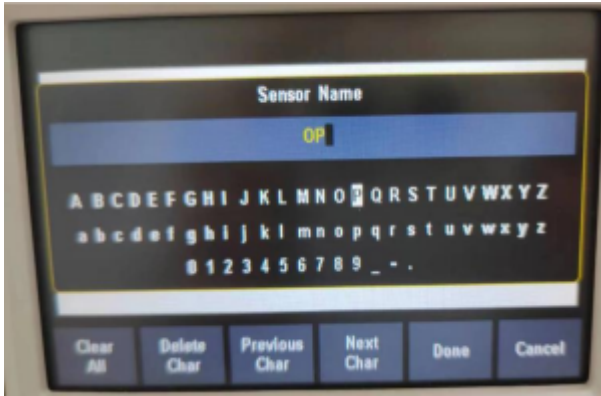
(3) Click 'Attribute'.



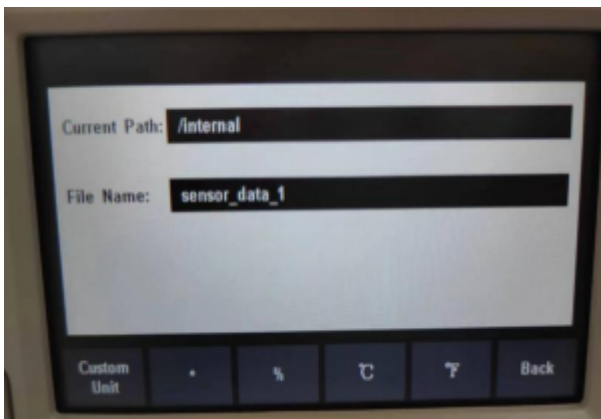
(4) Click 'Type' to select the type of sensor in the 'Type' option. Here I choose DCV and the multimeter will show the voltage value of the sensor.



(5) Click 'Sensor Name' to set a name.



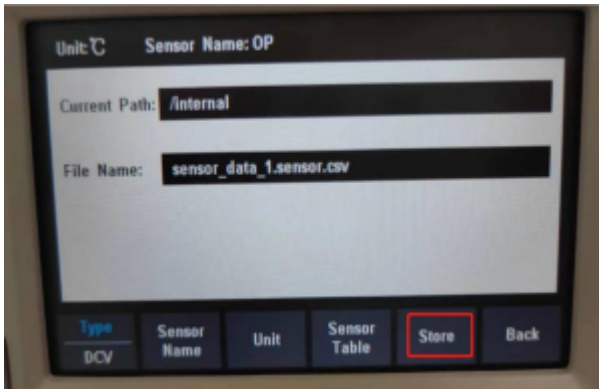
(6) Click 'Unit' to choose units of temperature. Here I choose °C.



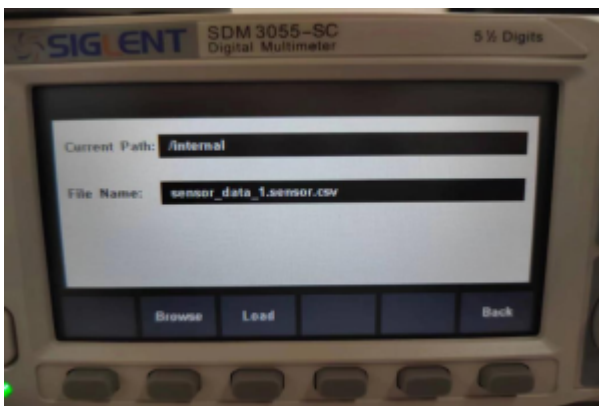
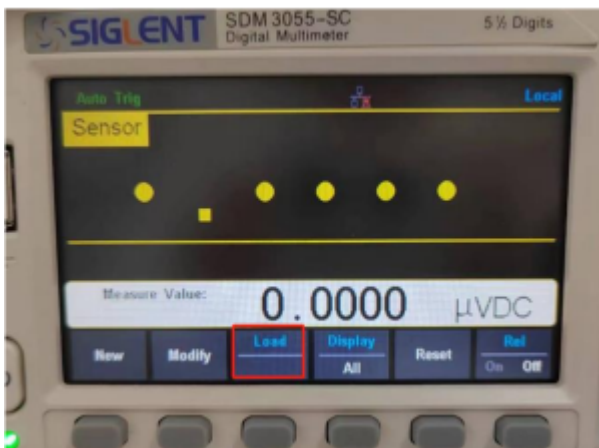
(7) Click 'Sensor Table' to setting the values you measure and the corresponding values. Because the sensor type previously selected was DCV, so the column on the left shows the actual measured values, unit is mV. the right column is the corresponding temperature value, unit is °C . According to this sensor datasheet, the values we measure will be converted into temperature values.

Number	Measured Value	Corresponding Value
1	-0.001000	20.000000
2	0.000000	30.000000
3	0.001000	40.000000
4	0.002000	50.000000
5	0.006000	60.000000

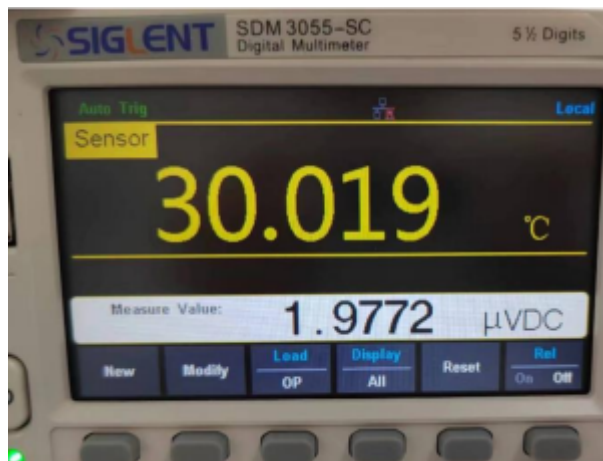
(8) Click 'Store' to save.



4. Back and click 'Load' to open the sensor file you just saved.



5. This is the temperature value measured with custom sensor.





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