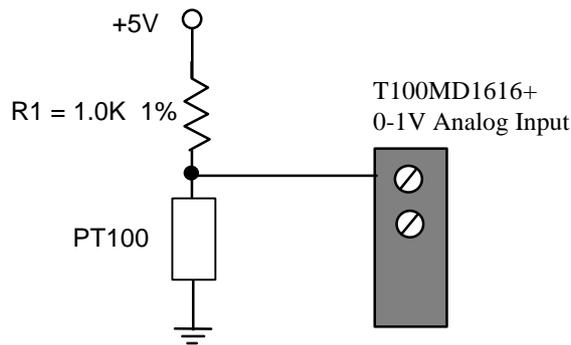


Simple Interfacing of PT100 sensor to T100MD1616+ Input #1 and #2.



$$R1 = 1000$$

Temperature Celsius	PT100 Resistance	Voltage at analog input	ADC(1) reading.
-40	85	0.391705069	1604
-20	92	0.421245421	1725
0	100	0.454545455	1862
20	108	0.487364621	1996
100	138	0.606326889	2484
200	176	0.74829932	3065
300	214	0.881383855	3610
350	233	0.944849959	3870

The above allow measurement up to 350 degree C. For other temperature range, change the value of R1 accordingly.

Note: The above circuit arrangement is a low cost way of interfacing a PT100 to the T100MD1616+ when accuracy is not of paramount importance. If accuracy is important, you will need to use temperature-compensated differential amplifiers to amplify a smaller voltage drop (to avoid the effect of self-heating) across the PT100 sensor to 0-5V and connect it to the 0-5V Analog inputs of the T100MD+ or T100MX+ PLCs, as illustrated in the diagram below:

