



# TECHNICAL REFERENCE

## SENSOR RESISTANCE CHART – PRECON THERMISTORS

The PreCon sensor has a dissipation constant in still air at 25°C of 2.7 mW/°C. The heat dissipation constant is an expression in milliwatts of the power required to raise the temperature of a thermistor 1°C above the ambient.

Temp °F	PRECON TYPE II				PRECON TYPE III	PRECON TYPE IV
	Model 21 2252Ω @ 77°F ±0.36°F from 32° to 158°F	Model 22 3000Ω @ 77°F ±0.36°F from 32° to 158°F	Model 24 10,000Ω @ 77°F ±0.36°F from 32° to 158°F	Model 27 100,000Ω @ 77°F ±0.36°F @ 77°F ±1.3°F from 32° to 158°F	Model 3 10,000Ω @ 77°F ±0.36°F from 32° to 158°F	Model 42 20,000Ω @ 77°F ±0.36°F from 32° to 158°F
	Resistance	Resistance	Resistance	Resistance	Resistance	Resistance
-35	63.08K	84.09K	280.1K	2801K	203.6K	
-30	52.72K	70.27K	234.1K	2341K	173.6K	
-25	44.20K	58.92K	196.3K	1963K	148.3K	
-20	37.19K	49.56K	165.1K	1651K	127.1K	
-15	31.38K	41.83K	139.3K	1393K	109.2K	
-10	26.57K	35.41K	118.0K	1180K	94.07K	270.6K
-5	22.57K	30.07K	100.2K	1002K	81.23K	228.0K
0	19.22K	25.61K	85.35K	853.5K	70.32K	192.6K
5	16.42K	21.88K	72.91K	729.1K	61.02K	163.1K
10	14.07K	18.74K	62.48K	624.8K	53.07K	138.7K
15	12.08K	16.10K	53.64K	536.4K	46.27K	118.3K
20	10.41K	13.87K	46.23K	462.3K	40.42K	101.0K
25	8988	11.98K	39.91K	399.1K	35.39K	86.60K
30	7782	10.37K	34.56K	345.6K	31.06K	74.40K
35	6755	8999	30.00K	300.0K	27.31K	64.10K
40	5877	7830	26.10K	261.0K	24.06K	55.30K
45	5126	6830	22.76K	227.6K	21.24K	47.89K
50	4482	5971	19.90K	199.0K	18.79K	41.40K
55	3927	5231	17.44K	174.4K	16.65K	36.10K
60	3448	4594	15.31K	153.1K	14.78K	31.44K
65	3035	4043	13.48K	134.8K	13.15K	27.46K
70	2676	3565	11.88K	118.8K	11.72K	24.02K
75	2365	3150	10.50K	105.0K	10.46K	21.06K
80	2094	2789	9298	92.98K	9354	18.50K
85	1858	2475	8250	82.50K	8378	16.29K
90	1651	2200	7331	73.31K	7516	14.37K
95	1471	1959	6532	65.32K	6754	12.69K
100	1312	1748	5826	58.26K	6078	11.24K
105	1173	1562	5209	52.09K	5479	9.97K
110	1050	1399	4663	46.63K	4947	8.86K
115	941.8	1254	4182	41.82K	4472	7.88K
120	846.0	1127	3757	37.57K	4049	7.03K
125	761.3	1014	3381	33.81K	3671	6.27K
130	686.1	913.9	3047	30.47K	3333	5.61K
135	619.4	825.0	2750	27.50K	3031	5.03K
140	559.9	745.9	2486	24.86K	2759	4.51K
145	507.0	675.4	2251	22.51K	2515	4.06K
150	459.7	612.4	2041	20.41K	2296	3.65K
155	417.5	556.2	1854	18.54K	2098	3.29K
160	379.6	505.8	1686	16.86K	1920	2.97K
165	345.7	460.7	1535	15.35K	1759	2.69K
170	315.2	420.1	1400	14.00K	1614	2.43K
175	287.8	383.7	1278	12.78K	1482	2.20K
180	263.1	350.8	1168	11.68K	1362	2.00K
185	240.9	321.2	1070	10.70K	1254	1.82K
190	220.8	294.5	980.5	9805	1156	1.65K
195	202.6	270.3	899.6	8996	1066	1.51K
200	186.2	248.4	826.8	8268	984.0	1.38K
205	171.3	228.5	760.7	7607	909.8	1.26K
210	157.8	210.5	700.7	7007	841.9	1.15K
215	145.5	194.1	646.1	6461	779.8	1.05K
220	134.3	179.2	596.4	5964	723.0	967.5
225	124.2	165.6	551.5	5515	671.0	888.4
230	114.9	153.2	510.2	5102	623.3	816.6
235	106.4	141.9	472.5	4725	579.5	
240	98.7	131.5	438.3	4383	539.4	