

ROOM TEMPERATURE SENSOR



STTR

STTR221, STTR222, STTR223, STTR224

Application

"STTR" Room Temperature Sensor is intended for heating, ventilating, air conditioning and other industrial installations for control and receiving reference signals from any space or room.

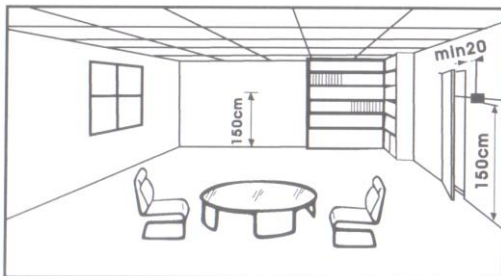
Compact design of the detector is idealistic for maintenance or replacement without any special tools. Units contain either a high quality platinum sensing element suitable for use in the range -10 ~ +70°C.

Technical Data

MODEL	ELEMENT	RANGE	ACCURACY	WIRE	SUITABLE
STTR221	Pt100Ω	-10 ~ 70°C	±0.15°C (at 0°C)	3wire/ 1.0mm ²	
STTR222	Pt1000Ω	-10 ~ 70°C	±0.3°C (at 0°C)	3wire/ 1.0mm ²	
STTR223	NTC3KΩ	-10 ~ 70°C	±0.2°C (at 25°C)	3wire/ 1.0mm ²	
STTR224	NTC10KΩ	-10 ~ 70°C	±0.2°C (at 25°C)	3wire/ 1.0mm ²	

- SENSING TIME : About 5min (at 0.15m/sec velocity)
- AMBIENT TEMPERATURE : -10 ~ +70°C
- AMBIENT HUMIDITY : 5 ~ 95%Rh
- APPLICATION : DDC System and controller
- CHARACTERISTICS : Table of Reference Values
- PROTECTION CLASS : IP 30 to EN60529
- HOUSING MATERIAL : PC
- WEIGHT : 70g

Installation

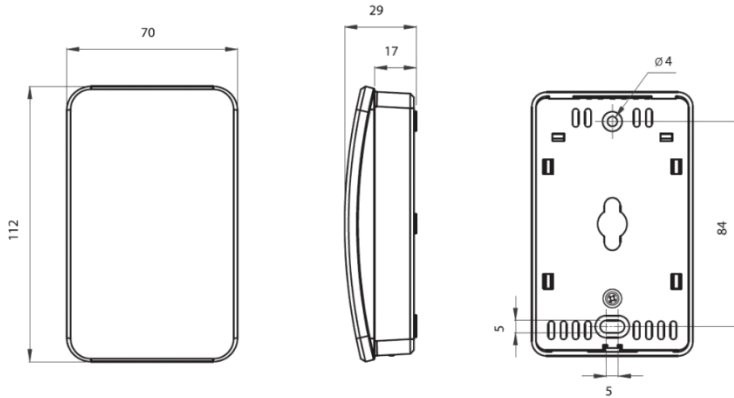


- When the detector has to be installed on a wall in a room, the location of the detector must be kept between 1 to 1.5m from the floor level. For accurate control of the temperature follow recommendation as: - avoid window access, behind furniture, dead spaces, behind curtain.
- Sensor should not be exposed to direct sun light and wire tube should be shielded to protect sensing errors from the wind coming through wire tube. Sensors have to install more than 1.5m from the bottom.

Wiring Diagram



Shape Dimension



Product Data

RESISTANCE CURVE TABLE

Temperature		Pt100	Pt1000	NTC3K (ACI/3K)(22)	NTC10K (Type II)(CP)	NTC10K (Type III)(AN)	Temperature		Pt100	Pt1000	NTC3K (ACI/3K)(22)	NTC10K (Type II)(CP)	NTC10K (Type III)(AN)
Temp	Temp	Resistance	Resistance	Resistance	Resistance	Resistance	Temp	Temp	Resistance	Resistance	Resistance	Resistance	Resistance
°C	°F	Ω	Ω	Ω	Ω	Ω	°C	°F	Ω	Ω	Ω	Ω	Ω
-40	-40	84.3	843	100.701	332.15	239.78	50	122	119.4	1194	1.081	3.60	3.85
-35	-31	86.2	862	72.658	242.12	179.25	55	131	121.3	1213	896	2.99	3.23
-30	-22	88.2	882	53.196	173.34	135.23	60	140	123.2	1232	747	2.49	2.72
-25	-13	90.2	902	39.190	129.40	102.51	65	149	125.2	1252	625	2.08	2.30
-20	-4	92.2	922	29.162	96.46	79.01	70	158	127.1	1271	526	1.75	1.96
-15	5	94.1	941	21.909	71.25	61.02	75	167	129.0	1290	445	1.48	1.70
-10	14	96.1	961	16.611	54.99	47.55	80	176	130.9	1309	378	1.26	1.43
-5	23	98.0	980	12.705	42.17	37.55	85	185	132.8	1328	322	1.07	1.23
0	32	100	1000	9.800	32.56	29.99	90	194	134.7	1347	275	0.92	1.08
5	41	102.0	1020	7.620	25.34	23.90	95	203	136.6	1366	237	0.79	0.94
10	50	103.9	1039	5.971	19.87	19.03	100	212	138.5	1385	204	0.68	0.81
15	59	105.8	1058	4.713	15.93	15.26	105	221	140.4	1404	177	0.59	0.72
20	68	107.8	1078	3.747	12.49	12.28	110	230	142.3	1423	153	0.51	0.62
25	77	109.7	1097	3.000	10.00	10.00	115	239	144.2	1442	134	0.45	0.54
30	86	111.7	1117	2.416	8.06	8.17	120	248	146.1	1461	117	0.39	0.48
35	95	113.6	1136	1.959	6.53	6.71	125	257	148.0	1480	103	0.34	0.42
40	104	115.5	1155	1.597	5.33	5.55	130	266	149.8	1498	90	0.30	0.37
45	113	117.5	1175	1.310	4.37	4.61	135	275	151.7	1517	80	0.26	0.33
							140	284	153.6	1536	71	0.23	0.30