



INF-CLT5-5.5

Infrared Temperature Sensor

SN: I#####

Texense sensors are designed for data logging. Should the users want to include this sensor in a closed loop system, they must undertake total responsibility from doing so.

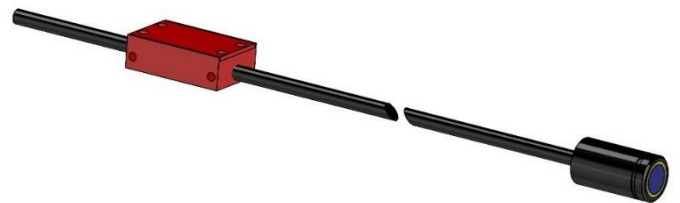
Measurement features		
Range ⁽¹⁾	500, 700 or 1200	°C
Accuracy	±1	% FS
Sensitivity at + Full-scale	Range 500°C	25
	Range 700°C	20
	Range 1200°C	13.5
Response time	50	ms
Sensitive Element	Thermopile with silicon lens	
Wavelength	8 to 14	µm
Measurement distance	30 to 100	mm
Field of view (90% radiation)	5:1 at 50mm	
Calibrator Reference	Land R1200P	
Calibrator Emissivity	99%	
Electrical features		
Supply Voltage	5.5 to 16	V
Supply Current	<1.5	mA
Protection	Reverse voltage and short circuit protection	
Output signal	0-5	V
Mechanical features		
Cell dimensions	See drawing	
Amplifier dimensions	25 x 16 x 8	mm
Maximum distance between cell and amplifier	500	mm
Material	Aluminum	
Weight (without cable)	15	g
Environment		
Protection	IP64	
Vibration test	20Gpp 5'	
Shock	500	G
Operating Temp (Cell)	-20 to +180	°C
Operating Temp (Amplifier)	-20 to +150	°C
Storage Temp	-40 to +125	°C

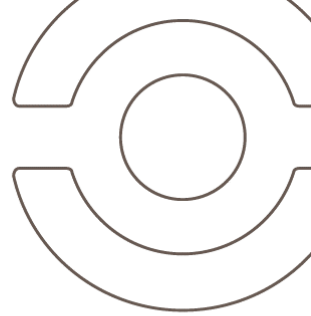
(1) The minimum measurable temperature is limited to the ambient temperature of the amplifier and the cell.

Date		Operator	
Customer			
Order			
Ref	INF-CLT5-5.5-###-##-###		

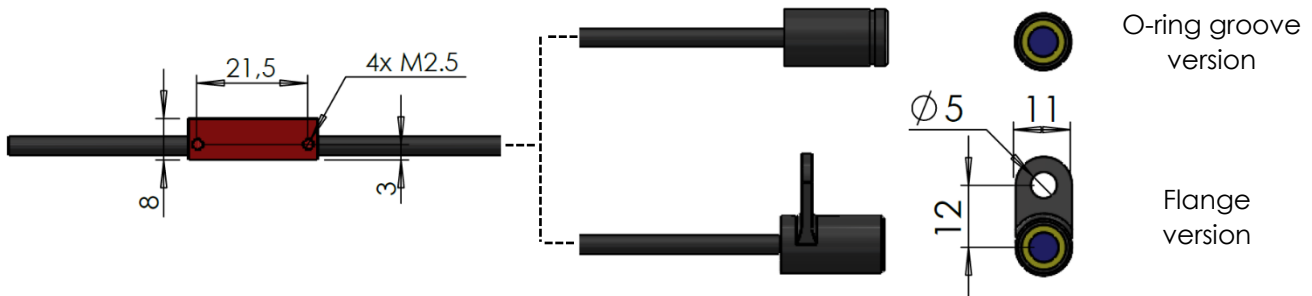
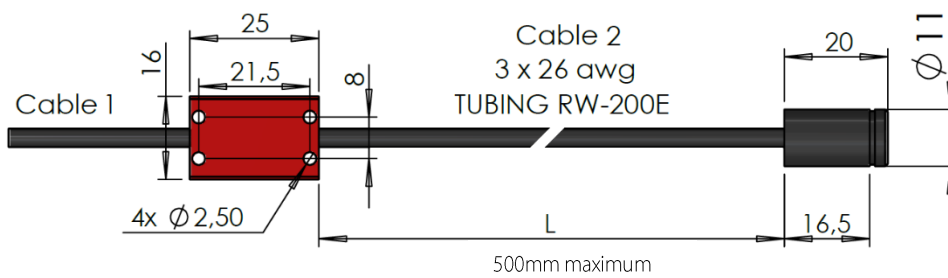
Sensor readings	
Calibrator temperature (°C)	Signal output value (V)
25°C	...V
...°C	...V

Cable 1 (Amplifier to System)		
<input checked="" type="checkbox"/> 3x26AWG FEP tinned copper braided cable 250V 200°C <input type="checkbox"/> EPD117723A Length: 1000 mm Tubing:		
Color	Function	Pin
Red	Supply	-
White or Yellow	Signal	-
Black	0V	-
Braid (not for EPD117723A)		-
Cable 2 (Cell to Amplifier)		
3x26AWG tinned copper braided cable 250V 200°C Length to be specified at the order (see <i>Ordering information</i>) Tubing :1/8- RW-200-E		



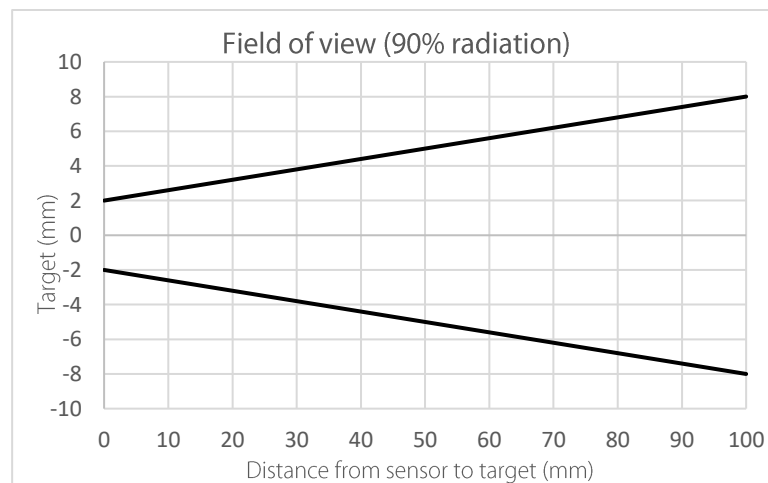


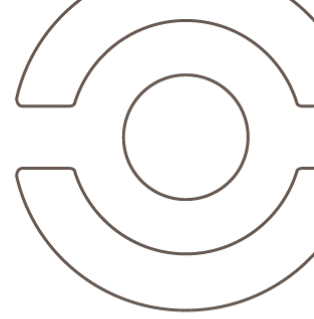
Mechanical drawing



Warning: the metallic ring around the lens is connected inside the sensor. Avoid any electrical contact.

FOV (field of view)





Calibration tables

Range 500°C		
Target temperature (°C)	Output for carbon target (V)	Output for steel target (V)
25	0.000	0.000
50	0.041	0.020
100	0.158	0.090
150	0.332	0.210
200	0.580	0.397
250	0.920	0.669
300	1.374	1.043
350	1.963	1.538
400	2.712	2.174
450	3.648	2.971
500	4.800	3.953

Range 700°C		
Target temperature (°C)	Output for carbon target (V)	Output for steel target (V)
25	0.000	0.000
50	0.016	0.008
100	0.062	0.035
150	0.130	0.082
200	0.228	0.156
250	0.362	0.263
300	0.540	0.410
350	0.771	0.604
400	1.066	0.854
450	1.434	1.168
500	1.886	1.553
550	2.436	2.021
600	3.095	2.579
650	3.878	3.241
700	4.800	4.020

Range 1200°C		
Target temperature (°C)	Output for carbon target (V)	Output for steel target (V)
25	0.000	0.000
100	0.012	0.007
200	0.045	0.031
300	0.106	0.080
400	0.210	0.168
500	0.371	0.306
600	0.609	0.507
700	0.945	0.791
800	1.401	1.178
900	2.005	1.695
1000	2.784	2.374
1100	3.770	3.249
1200	5.000	4.348

Ordering information

Ordering ref:

INF-CLT5-5.5 – Range – Housing – L

500: 500°C range

700: 700°C range

1200: 1200°C range

Cable 2 length in mm (500mm maximum)

OR: O-ring groove

FG: Flange

ex: INF-CLT5-5.5-500-OR-300