

# INFS-V90

## 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.

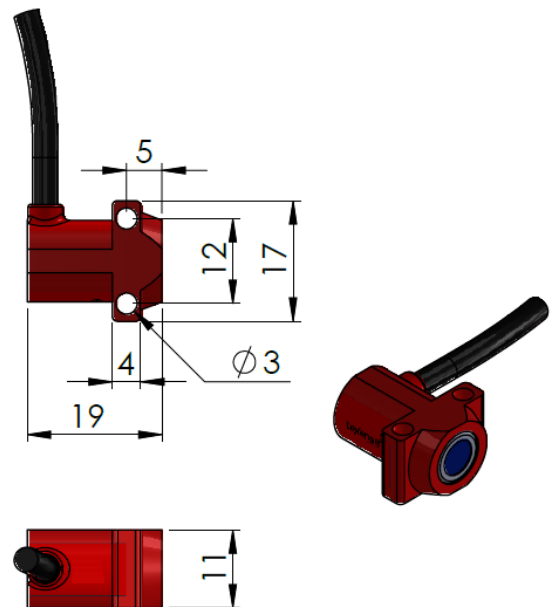
Measurement features		
Range	1000 or 1200	°C
Accuracy <sup>(1)</sup>	±1	%FS
Sensitivity at +Full-scale	Range 1000°C	15
	Range 1200°C	13.5
Response time	50	ms
Sensitive Element	Thermopile with silicon lens	
Wave Length	8 to 14	µm
Measurement distance	30 to 100	mm
Field of view (90% radiation)	5:1 at 50mm	
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		
Dimensions	19 x 17 x 11	mm
Material	Aluminum	
Weight (without cable)	6	g
Environment		
Protection	IP64	
Vibration test	20Gpp 5'	
Shock	500	G
Operating Temp	-20 to +150	°C
Storage Temp	-40 to +150	°C

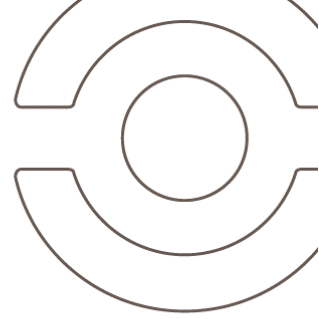
(1) The accuracy is only guaranteed if sensor ambient temperature is within 0°C to 100°C and target temperature ≥300°C

Date		Operator	
Customer			
Order			
Ref	INFS-V90-####		

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

Cable		
Cable: EPD117723A		
Length: 1000 mm ±10%		Tubing: None
Connector: N/A		
Color	Function	Pin
Red	Supply	-
White or Yellow	Signal	-
Black	0V	-



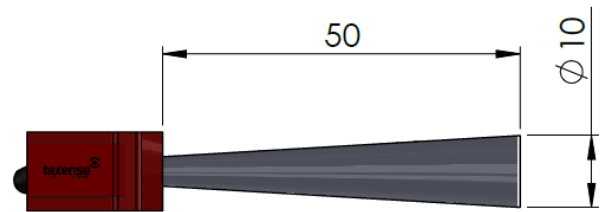
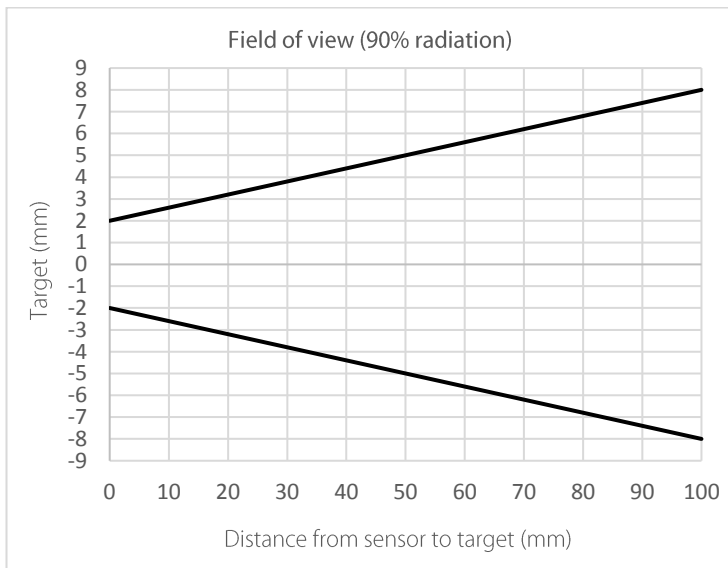


## Calibration table

Range 1000°C		
Target temperature (°C)	Output for carbon target (V)	Output for steel target (V)
25	0.000	0.000
100	0.021	0.012
200	0.076	0.052
300	0.180	0.137
400	0.355	0.285
500	0.628	0.517
600	1.031	0.859
700	1.598	1.338
800	2.370	1.992
900	3.391	2.866
1000	4.710	4.016

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

## FOV (field of view)



## Ordering information

**Ordering ref:**

INFS-V90 – Range

1000: 1000°C range

1200: 1200°C range

ex: INFS-V90-1000