texense
sensors by TEXYS

IRN2-LR (Low Range)

Infrared Temperature Sensor Low Range

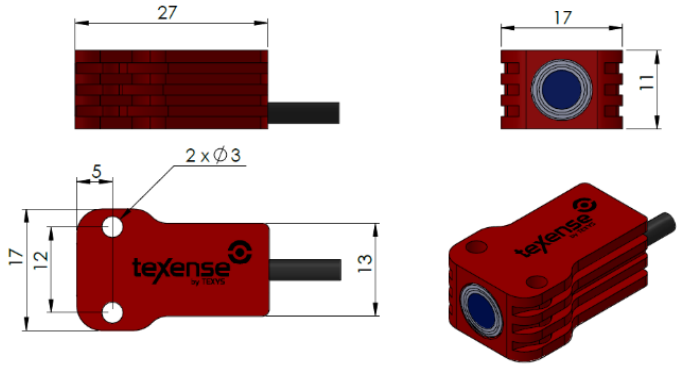
Measurement features			
Available ranges		100, 150, 200, 300, or 500	°C
Accuracy (1)		2	%FS
Ambient temperature error		±0.5	°C
Response time (0 to 90%)		50	ms
Sensitive Element		Thermopile with silicon lens	
Wavelength		8 to 14	µm
Measurement distance		20 to 150	mm
Field of view (90% radiation)		4:1 at 50mm	
Calibrator reference		Land P550P	
Calibrator emissivity		99%	
Emissivity and distance tuning		Gain factor from 0.1 to 10	
Electrical features			
Supply Voltage	3V version	3.3 to 30	V
	5V version	5.5 to 30	
	10V version	10.5 to 30	
Supply Current		4	mA
Protection		Reverse voltage and short circuit protections	
Analog output signal	3V version	0…3	V
	5V version	0…5	
	10V version	0…10	
Analog output impedance		47	Ω
Digital output feature		ASCII data at 50Hz	
Mechanical features			
Materials and dimensions		See §Housing options	
Weight wo cable	Al	15	g
	SS 316L	21	g
Environmental features			
Protection		IP65	
Vibration test		20Gpp 5'	
Shock		500	G
Operating temperature		-20 to +120	°C
Storage temperature		-40 to +125	°C

(1) See calibration tables for more details.

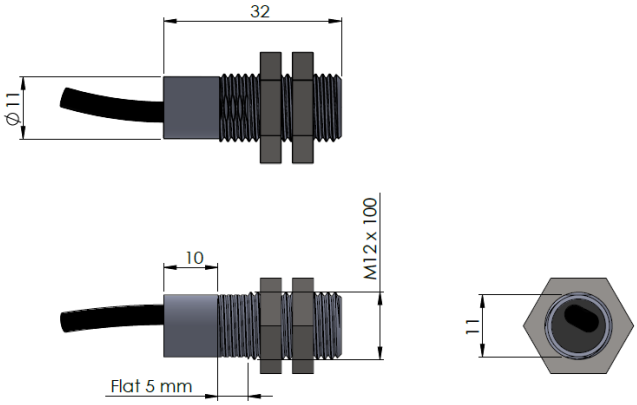
Texense sensors are designed for data logging. Should the users want to include this sensor in a closed loop system, they must undertake total responsibility from doing so.

Housing options

"T": Aluminium shape housing



"V": Aluminium M12 housing



Ordering informations

IRN2 *Housing – Range – Output*

T: T shape
T-RA: T shape with right angle cable output
TS: TS shape
TS-RA: TS shape with right angle cable output
V: M12 shape, Aluminium material
V-I: M12 shape, SS316L material
VD-I: M12 shape w D cut, SS316L material

3: 0…3V signal
5: 0…5V signal
10: 0…10V signal

100: -20°C…100°C range
200: -20°C…200°C range
300: -20°C…300°C range
500: -20°C…500°C range

ex: IRN2V-300-5