

(Picture shows a human head watching to the side, taken with the HTPA32x32dL5.0)



HTPA32x32d

Infrared Thermopile Array Sensor

The HTPA32x32d is an infrared array sensor with a resolution of 32x32 Pixel in a TO39 housing. Due to the digital I²C interface only 4 pins are needed. It has a built in EEPROM to store all calibration data and a 16-bit ADC. The Speed can be set internally via the sensor clock and ADC-resolution up to 15 Hz (highest resolution) or up to 60 Hz (lowest resolution).

Parameter	Value	Tolerance	Units
Supply Voltage (DC)	3.3	± 0.3	V
Current consumption	8	± 1	mA
Clock Frequency (Sensor)	5	± 3	MHz
Ambient temperature range	-20 to 85		°C
Object temperature range	-20 to >1000		°C
Framerate (full frame)	2 to 60		Hz
Framerate (quarter frame)	8 to 240		Hz
NETD (estimated)	150		mK@1Hz

Available Optics:



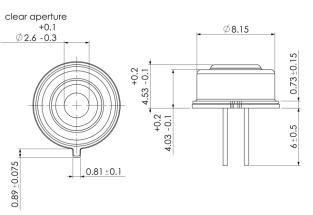
Optic	L2.1[Si]	L3.6[Si]	L5.0[Ge]*	L7.0[Si]	L5.0[Ge]**
FoV [°]	90	43	33	23	33
Length of cap [mm]	4.53	6.71	7.63	9.4	10.41
F-number	0.8	0.9	0.85	1.2	0.85

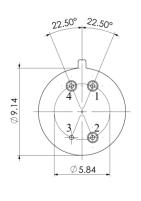
- *: Ge optics are having the best performance but are more expensive
- **: Same optics, but an external aperture for better performance is added

Package outline:

HTPA32x32L2.1, TO39 housing (Other optics are available)

Pin	Function
1	Clock (I ² C)
2	3.3 V supply
3	Ground
4	SDA (I ² C)





HEIMANN Sensor GmbH Maria-Reiche-Str. 1 01109 Dresden, Germany **Contact / Customer Support**Phone 49 (0) 6123 60 50 30
Fax 49 (0) 6123 60 50 39

Internet

www.heimannsensor.com e-mail: info@heimannsensor.com