



Thermal imaging core SupCor1280 is with a 12um remarkable 1.3 MP Vox detector, provides vivid HD thermal video output to ensure user to see more subject details at any harsh environment.

The core SupCor1280 utilizes image enhancement for advanced image processing, and being embedded with Auto-focus driver to offer clear thermal imaging video with zoom lens.

The core SupCor1280 is easy and convenient integrated into thermal systems with multi interface output, and widely used for thermal security and surveillance systems, as well as in industrial imaging systems.



SupCor1280







## **Benefits & Features**

• High resolution: 1280 x 1024 pixels, 12um

• Small size: 48 x 48 x 44.8 mm(w/o lens)

• Light weight: < 170g (w/o lens)

• Time to image: < 8s

• Continuous digital zoom: 65x - 400x

· Pseudocolor analog output

· HDMI digital video output

• Auto-focus driver integrated

· Cameralink interface optional

• Expansion board available

· Variety infrared lens optional

## **Technical Specifications**

	SupCor1280					
Detector data						
Detector Type	Uncooled LWIR VOx Microbolometer					
IR resolution	1280 x 1024 pixels					
Pixel pitch	12 µ m					
Spectral range	8~14 µ m					
Frequency	50 60Hz					
Image Presentation						
FFC duration	<0.5s					
NUC Calibration	Auto Manual, NUC interval time adjustable					
Thermal sensitivity (NETD)	<35mk@300K, f1.0					
Time to image	<8s					
Digital zoom	continuous digital zoom x65 - x400					
Image control	Image mode(AGC), digital zoom, false color or monochrome thermal video, contrast, brightness, sharpness, denoise, zero cross, system settings					
Image mode	Auto FG, Auto BG, Manual					
Core control	Auto   Manual via GUI or serial command					
Analog video output	PAL(standard), NTSC(optional)					
Digital video output	HDMI(BT1120 1080p50Hz, Cameralink optional)					
Interface						
Primary Electrical connector	60-PIN output(standard board) 40-PIN output(expansion board)					
Control port	UART RS232 LVCMOS 2.5V-3.3V					
Working voltage range	DC: +5V~6V					
Powr dissipation	<3.5W@5V (<10W@max)					
<b>Environment Data</b>						
Operating temperature	-40℃~60℃					
Storage temperature	-45℃~65℃					
Physical Data						
Weight (w/o lens)	<170g(w/cover)					
Size (w/o lens)	48 x 48 x 44.8 (w/o lens)					
Encapsulation	IP67 (for lens)					
Mounting	3 M2 x 3.5 mm at bottom of frame					
Packing included						
Standard	Thermal imaging core, serial Interface cable, manual CD, warranty card					
Optional	IR lens					

Lens data								
Focus Length		50mm	75mm	100mm	150mm	165mm	225mm	
F/#		1	1	1	1	1	1	
FOV	SupCor1280(12um 1280*1024	17.5° x 14°	11.7° x 9.4°	8.8° x 7.0°	5.9° x 4.7°	5.3° x 4.3°	3.9° x 3.1°	
Range Performance	For Human	2085m	3125m	4165m	6250m	6875m	9375m	
Human (1.8 x 0.5m)		R 520m	780m	1040m	1560m	1715m	2345m	
Vehicle (2.3 x 2.3m)		I 260m	390m	520m	780m	860m	1170m	
Detection (D)	For Vehicle	6390m	9580m	12775m	19165m	21085m	28750m	
Recognition (R)		R 1595m	2395m	3195m	4790m	5270m	7185m	
Identification (I)		795m	1195m	1595m	2395m	2635m	3595m	

- 1.FOV is calculated by maths formular without considering distortion.
- 2.Min focus distance: athermal lens depends on the lens thread which is allowed to move the maximum distance. (the lens data might be inaccurate or
- 3.Manual & motorized lenses data are not indicated, please contact iTherml for more detailed information.
- 4.The lens length refers to the distance from the lens front surface to the end of the lens.
- 5.DRI: DRI value is the nominal value, only for estimated value. DRI accurately calculated depending on a variety of specific conditions, please contact ITherml for specific applications.
- 6. Customized lense are available, including manual, athermal, motorized lenses.

<sup>\*\*</sup>iTherml shall reserve the right to adjust the SupCor1280 parameters without any note.

