



Pilotix T640 thermal imaging module featuring an uncooled vanadium oxide (VO) infrared focal plane array with 640x512 resolution and 12µm pixel pitch. The sensor provides 40mK thermal sensitivity with white hot/black hot polarity modes and shutter-based non-uniformity correction. Equipped with a 9.1mm focal length lens at f/1.0 aperture, delivering 45.8° horizontal and 37.3° vertical field of view. Supports both analog CVBS and digital MIPI/USB video outputs. Operates at 5V input with 260mA power consumption. Compact design measuring 21x21x31.5mm and weighing 22g. Functions within -20°C to +40°C operating temperature range at 20-95% relative humidity.

Product details	
Model	T640
SKU	5054
Image sensor	
Sensor	VO, Uncooled IRFPA
Sensitivity	≤40mK
Resolution	640x512
Pixel size	12x12 µm
Polarity	White hot/black hot
Non-Uniformity Correction	Shutter correction
Thermal time constant	<12ms
Lens	
Focal length	9.1 mm
Iris	F1.0
Horizontal view	45.8°
Vertical view	37.3°
Electrical specification	
Input voltage	5V
Power consumption	260 mA @ 5 V

Interfaces	
Analog video output	CVBS
Digital video output	Mipi/USB
Mechanical specifications	
Dimension	21x21x31.5 mm
Weight	22 g
Operating conditions	
Humidity range	20-95% RH (non-condensing)
Operating temperature	-20 - 40 °C
Storage temperature	-30 - 50 °C
Common	
Warranty	2 years