TT-31M20-TIM

ThermalTronix Uncooled HD Thermal Imaging Module resolution 384 x 288 pixel, pitch: 17 µm. Continuous digital zoom, from 2 × -4 × (step of 0.1/1)

Product Features

TT-31M20-TIM is specially designed for those applications that are sensitive to volume, weight and power consumption. It is designed with shutter-less operation, small size, light weight and low power consumption. Compared with fellow product, it is assembled with 60 pin Hirose connector, supporting various serial communication and video output interfaces. It in suitable for miniaturized handheld devices, enhanced night vision goggles (ENVG), UAVs and multi-spectral systems.

Basic Functions

- Independently developed VOx focal plane arrays
- Resolution: 384 x 288, Pixel pitch: 17 µm
- Shutterless
- Improved digital denoise and digital detail enhancement
- High sensitivity: NETD ≤ 60mK
- Support various video outputs: PAL, BT.656, LVCMOS, LVDS
- Various interfaces optional: RS-232, RS-422, UART (3.3V)
- Low power consumption: ≤0.8W (Micro3120)
- Weight: ≤ 30g, Size: 26mm x 26mm x 18mm

Thermal 384 x 288 Sample Images

Specifications

Model	TT-31M20-TIM
System Type	Uncooled LWIR Thermal Imaging Module
Performance	
Resolution	384 x 288 VOx Microbolometer
Pixel Pitch	17 µm
Spectral Band	8-14 µm
Sensitivity (NETD)	≤ 60mK (50mK optional)
Video Format	
Frame Rate	50Hz
Digital Video	LVDS, 14-bit or 10-bit LVCMOS, Cameralink
Analog Video	1-CH PAL
Digital Zoom	Continuous digital zoom, from 2 × -4 × (step of 0.1/1)
Power System	
Input Voltage	4 – 6 V Base configuration 5 – 24 V Base configuration with expansion board
Typical input Voltage	5V Base configuration 12VDC Base configuration with expansion board
Power Consumption	≤ 0.8W ≤ 0.9W (with expansion board)
Function	
Communication Interface	RS-232; RS-422; UART (3.3V)
Image Processing	Digital denoise Digital detail enhancement Non-Uniformity Correction
Image Control	Polarity: White Hot / black Hot Orientation: Vertical /Horizontal/Diagonal Pseudo-color: support Cross cursor: Display / Hide / Move
Physical Attributes	
Size	26mm x 26mm x 18mm
Weight	≤ 30g
Environmental	
Operating Temp Range	-40°C to +60°C
Storage Temp Range	-45°C to +85°C

All products, product specifications and data are subject to change without notice.