



TS-1 Thermal Imager OVERVIEW



OEM TAU Processor Boards Available on, feel free to smile.

Ultralight Handheld Thermal Imager

Our newly updated TS-1 Thermal Imager is the first camcorder-mounted uncooled microbolometer IR camera on the market to use FLIR's newest TAU 640 or TAU 320 Cores. Its' long-wavelength (8-14 micron) core can be used for all infrared imaging applications that demand absolute minimum size, weight, and power consumption.

This is the smallest, easiest to use, highest resolution thermal imager unit of its kind! Four pushbuttons control the 5 color/BW Modes, Zoom Mode, Brightness Mode, and Contrast Mode adjustments. The system is also factory programmable to incorporate other user-desired features if needed. The new TS-1 has two resolution choices: the stunning TAU 640 with 640 x 480 imager and the economical TAU 320 with a 320 x 240 imager. Whatever your choice, we have you covered.

The new TAU 640 is FLIR's first Commercial 17-micron Thermal Imager which provides four time the pixel count of its predecessors. The advent of micro-electronics technology has finally allowed the systems to be integrated onto one miniature, deployable, handheld platform. The TS-1 connects to a standard commercial Sony DVD-505 Handycam Camcorder which serves as the video recording platform for both visible and thermal imaging modes.

A new 3.5" high resolution monitor will also soon be available for our pistol grip mounted design making this package one of the lightest handheld imagers ever made. The internal, rechargeable PowerStream lithium ion battery pack delivers over 2200 mA of capacity allowing the imager to operate for up to 8 hours on a single charge! The ¼-20 base mount also lends itself to other mounting applications. Simple to operate, ultra lightweight design, and tremendous resolution – in the smallest package ever built. Go

Specifications

Detector	Uncooled Microbolometer Vanadium Oxide (VOx)	
	TAU 640	TAU 320
Array	Format: Block 2 (640x480)	Format: Block 2 (320x240)
Pixel Size	17 µm	25 µm
Spectral Response	8 to 14 µm Longwave Infrared (LWIR)	7.5 to 13.5 µm Longwave Infrared (LWIR)
Video Output	NTSC (PAL Optional)	NTSC (PAL Optional)
Frame Rate	30 Hz (320x240) 25 Hz PAL 60 Hz (320x120) 50 Hz PAL	30 Hz NTSC (640x480) 25 Hz PAL (640x480)
NEdT (subject to export license restriction)	<50 mK @ f/1.0 w/FLIR Proprietary Noise Reduction	<50 mK @ f/1.0 or <60 mK @ f/1.0
Shock	70g shock w/11 mSec Sawtooth	200g shock w/11 mSec Sawtooth
Time to Image	< 4 seconds. No Thermoelectric Cooler (TEC)	< 3.5 seconds
Image Control	B&W/Color Modes (5) Normal, 2X, 4x Zoom Brightness & Contrast	B&W/Color Modes (5) Normal, 2X, 4x Zoom Brightness & Contrast
Power Disipation	< 1.2 Watts	< 1.2 Watts
Size	3.3" L x 1.6" W x 1.7" H	3.3" L x 1.6" W x 1.7" H



Power outlets and surge suppressor.



Studs inside wall.

Features

- ▶ Multiple Lens Options: 5/9/13/19/25/35/60/100 mm
- ▶ Record/playback to the DVD Camcorder
- ▶ TAU 640 has 4 times the resolution
- ▶ Ultra-small size allows for easy concealment
- ▶ Thermal Imager operates for over 7 hours per charge
- ▶ Internal rechargeable PowerStream Li-ion batteries
- ▶ Create historical/archivable motion video for comparison
- ▶ Uses the Camcorder's screen for viewing and playback
- ▶ Thermal Imager fits into the palm of your hand
- ▶ Plug and play – Turn on and start viewing or recording!
- ▶ New Pistol Grip Version available Summer 2010
- ▶ New 3.6" minitor/DVR available Summer 2010
- ▶ OEM Processor Boards available. Please call for details.

