

# Advanced Thermo TVS-500

Advanced Thermo TVS-500 is a high-resolution / multifunctional thermography making use of the made-in-Japan uncooled IR FPA detector. It will fulfil all kinds of needs from wide variety of application, from R&D to non-destructive testing.



**NEW**



- High-resolution image by high-performance made-in-Japan sensor (Temperature resolution: 0.06°C)
- Sophisticated ergonomic design for pursuing ease of use.
- Unique USB capability for future system expansion.

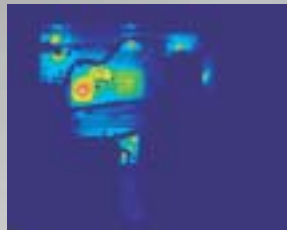
## Image mixing function adds great value to measurement.

Patent pending

Display mixing image of thermal image and image from integrated visible camera.



Visible image



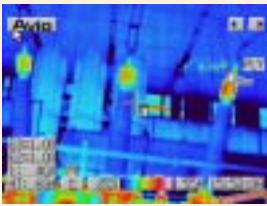
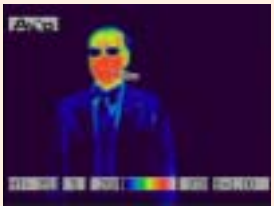
Thermal image



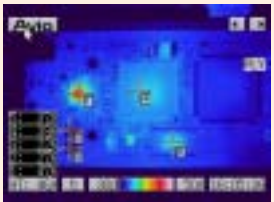
Mixing image

## Temperature tracking function, which is suitable for temperature measurement of moving object.

Tracks point of maximum or minimum temperature in the thermal image. (Area setting available, alarm signal output)

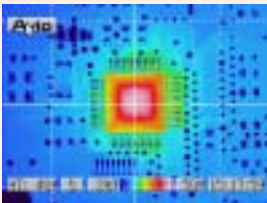
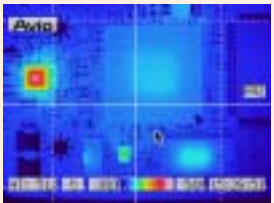


## Multi-point Emissivity Calculation



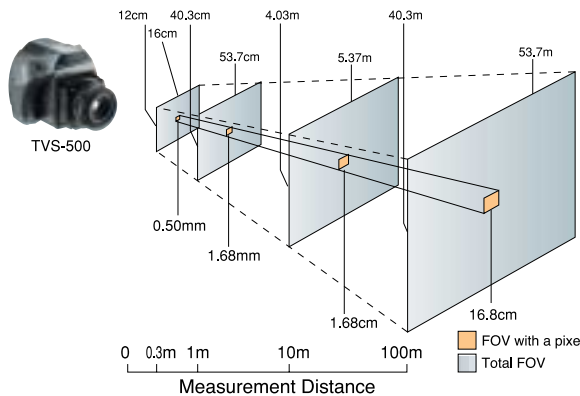
Input individual emissivity to get temperature value.

## Grid Display



Thermal images taken with 100 μ close-up lens(Option). Grid illustrates 1cm distance.

## Measurement Distance and FOV (with standard 22mm lens)



- Specifications and outline in this brochure are subject to change without notice for improvement.
- Since the product contains an item under export control, delivery is subject to necessary export licenses by the authorities. It is strictly regulated to export the product to certain areas.
- In case of retransfer, resale and/or reexport of the product, prior authorization by the authorities is required.

## Specifications

TVS-500	
Measurement Range	-40~500°C: Standard ~2,000°C: Option with High Temp Filter
Temperature Resolution	Better than 0.06°C with Averaging
Accuracy	±2°C or ±2% ※1
Frame Time	1/60 Sec.
Detector	Uncooled FPA, 320(H) x 240(V) VOx microbolometer
Wavelength	8~14 μm
FOV	30.6° (H) x 23.1° (V) (with 22mm standard lens)
Spatial Resolution	1.68mrad
Focus Distance	30cm~∞
Effective Pixels	320(H) x 240(V)
A / D	14Bit
Display	3.5" Transflective Color LCD Monitor Inverted Display
Visible Camera	640x480
Function	Point Temperature Read Out: 5 Points Maximum Point Emissivity Compensation: 5 Points Maximum(Back calculation) Mixing Image Display: Mixing of thermal image and visible image display with sequential ration change Maximum/Minimum Temperature Tracking: Yes Auto Temperature Tracking: Auto Sense / Auto Point / PPM/R&D/Medical Digital Zoom: X2, X4 Scroll, Area Scroll Freeze: On/Off Isotherm: High/ Low / Center Grid Display: Yes Alarm: Signal Output: Alarm display over high and low temp threshold (Single / Continuous) Image Recording: Yes Alarm triggered
CF Card	Color Pallet: Rainbow/Rainbow Contrast/Hotiron/Ironbow/Hotwhite/Hotblack Image Improvement: Averaging (2, 4, 8, 16 frames) Other Function: Emissivity Compensation, Day and Time Display, Battery Volume, Memo, Last Memory Data Storage: 150 frames/64MB, up to 512MB Mode: CF format / Delete / Make directory / File name input / One shot rec / Interval rec / One shot play back / Gallery display / File name display File Format: IRI, BMP, LOG(IR image) JPG(Visible image) BMP(Mixing image) Interval Record: Simultaneous Record of thermal, visible, mix
Temperature Unit	3S~23:59:59 °C / °F / K
Video Output	NTSC or PAL
PC Interface	RS-232C, USB, IEEE-1394 (Option) ※2
Power	Battery(Li-ion), AC adapter, Long Life Battery(Option)
Power Consumption	14W
Battery Duration	2H or more, 4H or more(Option)
Operation Temperature / Humidity	-10°C to 50°C / 80% non-condensing
Dimensions	115(W) x 220(D) x 90(H)mm / 4.5(W) x 8.6(D) x 3.5(H)in
Weight	1.7kg / 3.5lb (with lens)
Environmental Protection	IP54
Shock	30G IEC60068-2-27
Vibration	3G IEC60068-2-6

※1. Accuracy applies from -20 to 300°C ※2. USB and IEEE(Option) are exclusive to each other.

## Standard Configuration

- TVS-500(with 22mm standard lens) 1ea
- Shoulder strap
- Battery pack
- AC adapter
- Battery charger
- CF Card (64MB)
- Card Adapter
- Operation Manual

## Options

X2 wide angle lens, X2 telephoto lens, X3 telephoto lens, Close-up Lens (100 μ), Analysis software, IEEE-1349 kit, High temperature filter (900°C, 2000°C), Container case, Long-life battery



Please make sure to read the instruction manual carefully before use so that the equipment can be used safely. Do not leave the equipment in a place where there is water, moisture, steam, smoke, etc. It may cause fire, electric shock or failure of the equipment.



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