

Thermal Video System



# 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.



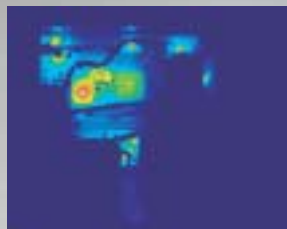
Image mixing function adds great value to measurement.

Patent pending

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



Visible image



Thermal image



Mixing image

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ISO 14001  
JQA-EM0156  
Yokohama Plant



ISO 9001  
JQA-1361

### 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)

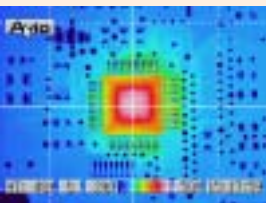
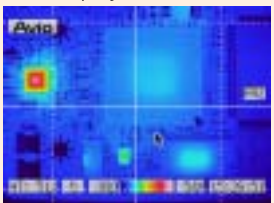


### Multi-point Emissivity Calculation



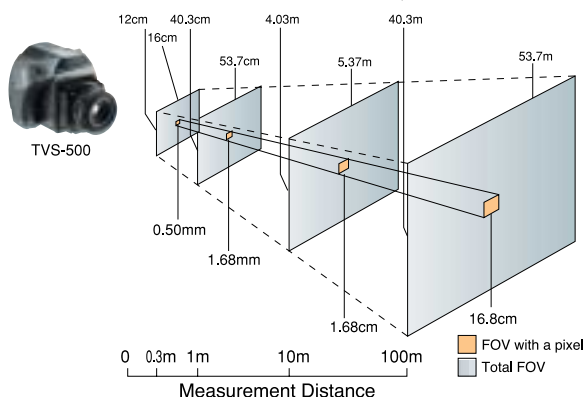
Input individual emissivity to get temperature value.

### Grid Display



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

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



### 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	$\pm 2^\circ\text{C}$ or $\pm 2\%$ ※1
Frame Time	1/60 Sec.
Detector	Uncooled FPA, 320 (H) x 240 (V) VOx microbolometer
Wavelength	8~14 $\mu\text{m}$
FOV	30.6° (H) x 23.1° (V) (with 22mm standard lens)
Spatial Resolution	1.68mrad
Focus Distance	30cm~ $\infty$
Effective Pixels	320 (H) x 240 (V)
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 Alarm display over high and low temp threshold (Single / Continuous) Signal Output Yes Image Recording Alarm triggered
Color Pallet	Rainbow/Rainbow Contrast/Hotiron/Ironbow/Hotwhite/Hotblack
Image Improvement	Averaging (2, 4, 8, 16 frames)
CF Card	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) Simultaneous Record of thermal, visible, mix Interval Record 3S~23:59:59
Temperature Unit	$^\circ\text{C}/^\circ\text{F}/\text{K}$
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 $\mu$ ), Analysis software, IEEE-1349 kit, High temperature filter (900°C, 2000°C), Container case, Long-life battery

- 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.



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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