

Introducing TVS-500 EX



Thermal and Visible... FUSED.

Electrophysics TVS-500 EX ushers in new advanced features designed to enhance thermographic analysis of a wide range of objects under evaluation. Our new image fusion function enables the camera operator to mix thermal and visible video into fused real-time video with control over each channel's contribution. An easy-to-use control permits the display to be adjusted from 100% thermal imaging to 100% visible imaging. In addition, a new auto-thermal scaling automatically displays thermal image detail within a user-specified temperature range overlaid over high-quality visible images.



▲ Ergonomic controls at your fingertips

The ergonomic, lightweight, waterproof (IP-54 rated) camera body makes it easy to control in the field. Select from a number of in-camera analysis tools including multiple point measurement, temperature alarm set point, area analysis, isotherm and auto hot/cold spot tracking. Measure temperatures up to 500°C/932°F (optionally 900°C/1652°F and 2000°C/3632°F) or as cold as -40°C (104°F) and record images in both 14-bit and standard JPEG file formats. The TVS-500 EX features a new intelligent auto-scale capability based on four unique auto-scale techniques designed for specific applications.

TVS-500 EX produces stunning thermal images at 60Hz with high resolution and high sensitivity. The camera has 7 unique color palettes that assure the best possible colorization for the application. When extra sensitivity is required, simply turn on the advance frame averaging function and improve the camera's sensitivity to better than 0.06°C (32.108°F).

TVS-500 EX has it all... great image, accurate measurement, best-in-class feature list, dual infrared and visible capability, and the best PC-based application software in the industry. Call us today to arrange a demonstration of the new standard in advanced thermography cameras.



Powerful Image Fusion

User-variable mixing of infrared and visible video.



60Hz Frame Rate

Image moving targets better than 30Hz cameras.



Ergonomic Design

Lightweight and easy to hold.



Industry-standard Interface

FireWire, USB and CF memory provide easy interface to PCs.



Advanced Features

Multi-mode auto-temperature settings, hot/cold spot tracking, interval recording and many more.

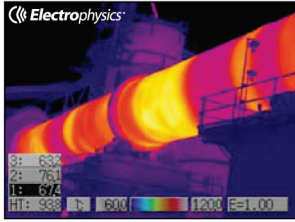


Highly Advanced Software Packages

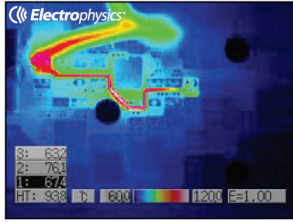
for PdM report writing and real-time image recording and analysis.

APPLICATIONS

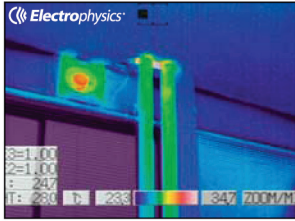
TVS-500 EX IS A POWERFUL TOOL



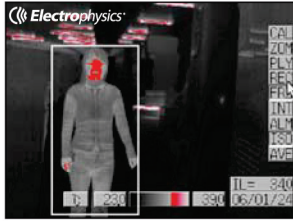
Process Control



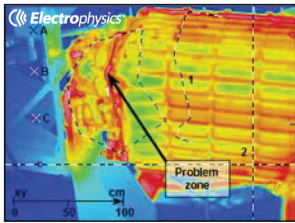
Test and Measurement



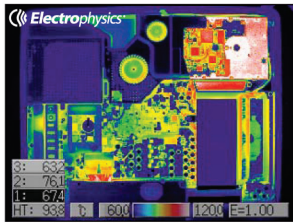
Building Diagnosis



Public Health Screening



Real-time PC-based Analysis



Research and Development

TVS-500 EX SPECIFICATIONS

Thermal Camera	
FoV (HxV) / Min. Focal Distance	30.6° x 23.1° / 30cm (11.81") to ∞
Uncooled Array Type (HxV)	FPA, 320x240 VOx microbolometer
Frame Rate	60Hz
Resolution	1.68 mrad
Thermal Sensitivity	Better than 0.06°C (32.108°F) with averaging
Spectral Response	8 to 14 microns (µm)
Visible Camera	640 x 480
Dynamic Range	14-bit
Image Presentation	
Display	3.5" Transflective Color LCD Monitor
Measurement	
Point Temperature Readout	5 points
Point Emissivity Compensation	5 points (back calculation)
Max./Min. Temperature Tracking	Yes
Isotherm	High / Low / Center
Spot Meters	5 (4 user-selectable placement)
Area	1 user-selectable placement; Min/max and average
Profile	1 user-selectable placement
Correction Factors	Emissivity, background, ambient
Measurement Range	-40°C to 500°C (-40°F to 932°F) Optional 900°C and 2000°C (1652°F to 3632°F)
Accuracy	±2°
Image Processing	
Mixing Image Display	Mixing of thermal image and visible image display with sequential ration change
Auto-Temperature Tracking	Auto-Sense / Auto-Point / PPM / R/D / Medical
Digital Zoom	2X, 4X Scroll, Area Scroll
Freeze	On / Off
Grid Display	Yes
Alarm
Signal Output	Alarm display over high and low temp. threshold (single/continuous)
Image Recording	Yes; Alarm triggered
Color Palette	Rainbow / Rainbow Contrast / Hotiron / Ironbow / Hotwhite / Hotblack
Image Improvement	Averaging (2, 4, 8, 16 frames)
Image Recording	
Image Download	CF card
Other Function	Emissivity compensation, day and time display, battery volume, memo, last memory
Internal Storage	150 frames / 64MB, up to 512MB
Modes	CF Format / Delete / Make Directory / File Name Input / One Shot Rec / Interval Rec / One Shot Playback / Gallery Display / File Name Display
Image Format	IRI, BMP, LOG (IR image), JPEG (visible image), BMP (mixing image)
Interval Record	Simultaneous record of thermal, visible, mix
Environmental	
Operating Temperature Range / Humidity	-10°C to 50°C (14°F to 122°F) / 80% non-condensing
Temperature Unit	°C / F / K
Enclosure Protection	IP-54
Shock	30G IEC60068-2-27
Vibration	3G IEC60068-2-6
Electrical	
Power	AC adapter, Long-life battery (optional)
Battery	Li-ion
Battery Operating Time	2 hrs. or more; Optional 4 hrs. or more available
Physical	
Weight (including lens)	1.7kg / 3.7lb
Size	4.5" x 8.6" x 3.5" (115 x 220 x 90 mm)

STANDARD CONFIGURATION

TVS-500 EX	AC Adapter	Card Adapter
Shoulder Strap	Battery Charger	Operating Manual
Battery Pack	CF Card (64MB)	

ORDERING CONFIGURATION

Item	Description
914717	TVS-500 EX Thermal Imaging Camera
914728	0.5X Wide Angle Lens
914725	2X Telephoto Lens
914722	3X Telephoto Lens
914729	Close-up Lens (100µ)
914730	IEEE-1349 Kit
924001	High Temperature Filter (900°C / 1652°F)
924002	High Temperature Filter (2000°C / 3632°F)
914732	Rechargeable Battery
914735	LCD Hood
914734	Remote Control
914667	Thermography Real-time Analysis Software
914405	EZ ReportIR Reporting Software

