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.

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.
PORTABLE THERMOGRAPHY SYSTEMS

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

STANDARD CONFIGURATION

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

ORDERING CONFIGURATION

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TVS-500 EX SPECIFICATIONS

- **Thermal Camera**
  - FoV (HxV) / Min. Focal Distance: 30.6° x 23.1° / 30cm (11.8") 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" Transreflective Color LCD Monitor

- **Measurement**
  - Point Temperature Readout: 5 points
  - Point emissivity Compensation: 2 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**
  - Image Recording: Yes, Alarm triggered
  - Color Palette: Rainbow / Rainbow Contrast / Hotiron / Ironbow / Hotwhite / Hotblack
  - Image Improvement: Averaging (2, 4, 8, 16 frames)

- **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: 3G, 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)