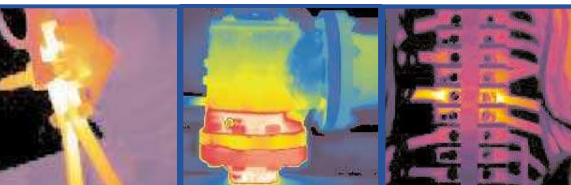


ThermaCAM® P60

The ThermaCAM® P60 is a powerful infrared inspection system, ergonomically designed to maximize the efficiency and productivity of the professional thermographer.

The P60 works in concert with reporting and database software to fully automate the process of collecting, reporting and archiving infrared images and information.



- OUTSTANDING IMAGE QUALITY
- PRECISION NON-CONTACT TEMPERATURE MEASUREMENT
- VISUAL AND THERMAL IMAGING
- ERGONOMIC, LIGHTWEIGHT AND PORTABLE
- WIRELESS IrDA COMMUNICATION
- DETACHABLE LCD WITH REMOTE CONTROL
- BUILT-IN LASER LOCATOR™
- HIGH SPEED IMAGE DOWNLOAD
- FULLY RADIOMETRIC JPEG IMAGE STORAGE
- INTEGRATED SOFTWARE FOR ROBUST PROFESSIONAL INSPECTION REPORTING

www.valuetronics.com



EXTRAORDINARY IMAGING AND THERMAL SENSITIVITY

Extremely high thermal sensitivity lets you see problems clearly and accurately. State-of-the-art, fourth generation 320 x 240 uncooled microbolometer FPA detector delivers outstanding, noise-free, crisp high-resolution images.

INSTANT PRECISION TEMPERATURE MEASUREMENT REVEALS CRITICAL DETAILS

Optimized for outstanding radiometric performance, view temperature differences as small as 0.06°C on sharp, calibrated high-definition images which are automatically adjusted to give you the best picture possible. Measure any one of the 76,000 picture elements in each image.

RUGGED, ERGONOMIC & LIGHTWEIGHT

Weighing less than 4.4 lbs., the P60 is the lightest full featured infrared camera ever built. This camera was built to withstand shock and vibration and carries the IP 54 industrial rating.

TWO-WAY WIRELESS IrDA COMMUNICATION

The standard IRDA link on the P60 allows the camera to transfer data to any PC or PDA equipped with this industry standard communications interface. In addition, text comments describing the component under inspection or the severity of the problem can be added to the image from your PDA and then automatically transferred into the infrared report.

CHOICE OF VIEWING OPTIONS FOR INSPECTION FLEXIBILITY

View images either on a built-in color viewfinder, ideal for outdoor applications, or on a detachable 4" LCD conveniently located on the camera's carrying handle. Adjust LCD to any angle for optimal viewing flexibility and comfort.

EASY-TO-OPERATE

User-friendly interfaces including joystick, familiar menus and three direct access buttons provide easy one-handed operation. Customize to your inspection needs; assign specific camera functions to user-programmable direct access control buttons.

LOCATE PROBLEMS QUICKLY, ACCURATELY AND SAFELY

Built-in color digital camera stores visual images together with corresponding thermal images, clearly pinpointing problem areas. Integral Laser Locator™ helps you quickly and safely associate the hot spot on the IR image with the real physical target.

ENHANCED CONNECTIVITY FOR HIGH SPEED IMAGE TRANSFER

Download images with full 14-bit pixel values and all relevant data to your PC quickly using USB digital link or RS232 standard serial connection. Standard composite video and s-video output for higher image definition available.

FLEXIBLE JPEG IMAGE STORAGE

Save images as fully radiometric JPEGs on removable compact Flash PC cards or in the P60's internal Flash memory. Continuous high speed image storage captures fast events. ThermaCAM Connect™ software (included) allows easy download of standard JPEGs to a PC.

OPTIMIZED TO MEET DEMANDING INSPECTIONS

Optional optics available to meet diverse applications, regardless of target size, distance or temperature variations. Long-life Li-Ion battery assures uninterrupted in-field inspections. Configurable sleep mode increases camera life and productivity. System status display indicates power, communication and storage modes.

IMAGING PERFORMANCE

THERMAL

Field of view/min focus distance	24° x 18° / 0.3 m
Spatial resolution (IFOV)	1.3 mrad
Thermal sensitivity @ 50/60Hz	0.06 °C at 30 °C
Electronic zoom function	2,4,8, interpolating
Focus	Automatic or manual
Digital image enhancement	Normal and enhanced
Detector type	Focal plane array (FPA) uncooled microbolometer 320 x 240 pixels
Spectral range	7.5 to 13 µm
VISUAL	
Built-in digital video	640 x 480 pixels, full color

IMAGE PRESENTATION

Viewfinder	Built-in high resolution color LCD (TFT)
External display	4" LCD with integrated remote control
Video output	RS170 EIA/NTSC or CCIR/PAL composite video and S-video

MEASUREMENT

Temperature ranges	-40°C to +120°C (-40°F to +248°F), Range 1 0°C to +500 °C (+32°F to 932°F), Range 2 Up to +1500 °C (+2732°F), optional Up to +2000 °C (+3632°F), optional
Accuracy (% of reading)	± 2 °C or ± 2%
Measurement modes	Spot/manual (up to 10 movable), Spot/automatic placement at max, min, Area (up to 5 movable), isotherm (2), line profile, Delta T
Emissivity correction	Variable from 0.1 to 1.0 or select from listings in pre-defined material list
Measurement features	Automatic corrections based on user input for reflected ambient temperature, distance, relative humidity, atmospheric transmission, and external optics.
Optics transmission correction	Automatic, based on signals from internal sensors

IMAGE STORAGE

Type	Removable Flash-card (128 MB), Built-in Flash memory (50 images)
File format – THERMAL	Standard JPEG, 14 bit measurement data included.
File format –VISUAL	Standard JPEG (including movable marker) linked with corresponding thermal image
Voice annotation of images	30 seconds of digital voice "clip" stored with the image
Text annotation of images	Predefined by user and stored with image.

SYSTEM STATUS INDICATOR

LCD Display	Shows status of battery and storage media. Indication of power, communication and storage modes.
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LASER LOCATIR™

Classification	Class 2
Type	Semiconductor AlGaInP Diode Laser: 1mW/635 nm (red)

POWER SOURCE

Battery type	Li-Ion, rechargeable, field-replaceable
Battery operating time	2 hours continuous operation
Charging system	In camera (AC adapter or 12V from car) or 2 bay intelligent charger
External power operation	AC adapter 110/220 VAC, 50/60Hz or 12V from car (cable with standard plug optional)
Power saving	Automatic shutdown and sleep mode (user-selectable)

ENVIRONMENTAL

Operating temperature range	-15°C to +50°C (5°F to 122°F)
Storage temperature range	-40°C to +70°C (-40°F to 158°F)
Humidity	Operating and storage 10% to 95%, non-condensing
Encapsulation	IP 54 IEC 529
Shock	Operational: 25G, IEC 68-2-29
Vibration	Operational: 2G, IEC 68-2-6

PHYSICAL CHARACTERISTICS

Weight	2.0 kg (4.4 lbs) w/battery and top handle (includes remote control, LCD, video camera and laser) 1.4 kg (3.1lbs) excluding battery and handle
Size	100mm x 120mm x 220 mm (3.9" x 4.7" x 8.7") camera only
Tripod mounting	1/4"- 20

THERMACAM® P60 SYSTEM INCLUDES:

- IR camera with visual camera, Laser LocatIR, remote control with LCD display
- Carrying case
- Lens cap, shoulder strap, hand strap
- Manual (multi-lingual)
- Batteries (2)
- Power supply
- Battery charger
- Head-set
- Video cable RCA-plug
- USB-cable
- S-video cable
- Training CD
- Flash Card
- ThermaCAM® Connect™ Software

LENSES [OPTIONAL]

Field of view/minimum focus distance

- 3X Telescope (7° x 5.3°/4m)
- 2X Telescope (12° X 9°/1.2m)
- 0.5X Wide angle (45° x 34°/0.1m)
- 0.3X Wide angle (80° x 60°/0.1m)
- 200 µm Close-up (64mm x 48mm/150mm)
- 100 µm Close-up (34mm x 25mm/80mm)
- 49 µm Macro (15mm x 11mm/19mm)

INTERFACES

USB / RS232	Image (thermal and visual), measurement data, voice and text transfer to PC
IrDA	Two-way data transfer to laptop, PDA
Remote control	Top carrying handle with video camera, laser locator and LCD



The Global Leader in Infrared Cameras

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