

# THERMACAM® PM 675



## *Handheld Thermal Imaging Camera*

### HIGH PERFORMANCE PREDICTIVE MAINTENANCE SYSTEM

Introducing the ThermoCAM® PM 675 portable infrared inspection system. Designed specifically to meet the needs of predictive maintenance professionals, the rugged PM 675 provides the power of the world's best selling IR camera platform at an affordable price. Automated camera and software capabilities make infrared inspection tasks easier, faster, and more accurate than ever before.

Featuring a third generation uncooled microbolometer detector, the most advanced IR camera technology available, the PM 675 provides outstanding longwave imaging performance and precision temperature measurements. Capture the information needed to see, measure and document thermal problems at the touch of a button. Features such as digital voice recording and drag and drop report generation make this camera the ideal choice for any predictive maintenance program.

Compare these features with any other IR camera, and understand why the ThermoCAM is #1 with plant engineers. Whatever the need, there is a ThermoCAM system right for any application and budget with a wide range of models to choose from.

- MAINTENANCE-FREE UNCOOLED DETECTOR**  
Patented solid state third generation microbolometer sensor needs no cryogenic cooling, making it the simplest and most reliable IR camera technology available.
- LONGWAVE IMAGING PERFORMANCE**  
Superb image quality, high precision measurement accuracy and longwave solar reflection immunity provide outstanding performance for most all PM applications. See problems while viewing crisp and highly detailed images on a built-in color viewfinder or optional large-format LCD panel.
- RUGGED PORTABILITY**  
With an all-metal sealed camera body constructed from a machined aluminum enclosure and contoured rubber grips, the PM 675 fits comfortably in one hand and requires no external cables to operate. For reliable, uninterrupted operation, ThermoCAM uses long-life, no-memory NiMH batteries providing over two hours of continuous operation.
- PRECISION TEMPERATURE MEASUREMENT**  
Evaluate the thermal condition of electrical and mechanical equipment on the spot. Built-in intelligence makes accurate non-contact measurements from -40° to 1000°C a snap.
- EASY-TO-USE**  
Press one button and obtain perfectly adjusted images; press again and store images to the removable PC card.
- DIGITAL IMAGE STORAGE AND VOICE ANNOTATION**  
Record and store up to 700 images captured in the field on removable PC cards which slide easily in to the sealed PM 675 camera body. Embed up to 30 seconds of voice annotation with each image file.
- FULLY AUTOMATED REPORT GENERATION**  
Create maintenance reports easily using ThermoCAM® Reporter™ Software. Drag and drop image files containing field inspection results onto the QuickReport™ icon and instantly create comprehensive IR inspection reports. Step-by-step Wizard guided functions allow even occasional users to create spectacular reports.
- UPGRADEABILITY**  
Designed to grow with your thermal imaging needs, the PM 675 is upgradeable to the world leading ThermoCAM PM 695 IR Predictive Maintenance System.

# THERMACAM PM 675 TECHNICAL SPECIFICATIONS

## IMAGING PERFORMANCE

<i>Field of view/min focus distance</i>	24° x 18° / 0.5m
<i>Spatial resolution (IFOV)</i>	1.3 mrad
<i>Thermal sensitivity</i>	0.1°C at 30°C
<i>Image frequency</i>	50/60 Hz non-interlaced
<i>Electronic zoom function</i>	4X continuous
<i>Detector type</i>	Focal Plane Array (FPA), uncooled microbolometer 320 x 240 pixels
<i>Spectral range</i>	7.5 to 13µm

## IMAGE PRESENTATION

<i>Video output</i>	RS170 EIA/NTSC or CCIR/PAL composite video
<i>Viewfinder</i>	Built-in, high-resolution color LCD (TFT), optional LCD panel

## MEASUREMENT

<i>Temperature range</i>	-40°C to +500°C (-40°F to 932°F) Up to +1000°C (1832°F), optional
<i>Accuracy</i>	±2°C, ±2%
<i>Atmospheric transmission correction</i>	Automatic, based on inputs for distance, atmospheric temperature and relative humidity
<i>Optics transmission correction</i>	Automatic, based on signals from internal sensors
<i>Automatic emissivity correction</i>	Variable from 0.1 to 1.0 or select from listings in pre-defined materials list

## IMAGE STORAGE

<i>Type</i>	High capacity PC-Card, ATA compatible (160MB min)
<i>File formats</i>	14-bit radiometric IR digital image (IMG), includes header file with all radiometric data 8-bit standard bitmap (BMP), image only or image with screen graphics Every image stored in both formats
<i>Voice annotation of images</i>	30 sec. of digital voice "clip" stored together with the image

## LENSES (OPTIONAL)

<i>Field of view/min focus distance</i>	7" telescope (7" x 5.3" / 6m) 12" telescope (12" x 9" / 2m) 45° wide angle (45° x 34" / 0.3m) 80° wide angle (80° x 60" / 0.2m) 200 µm close-up lens (64mm x 48mm / 150mm) 100 µm close-up lens (32mm x 24mm / 80mm)
<i>Lens identification</i>	Automatic

## BATTERY SYSTEM

<i>Type</i>	Internal rechargeable nickel metal hydride (NiMH) battery, field replaceable
<i>Operating time</i>	2 hours continuous operation
<i>Charging system</i>	4 bay intelligent charger 110/240 VAC, 50/60 Hz, autosensing
<i>Charging time</i>	1 hour
<i>AC Adapter</i>	Included

## ENVIRONMENTAL SPECIFICATION

<i>Operating temperature range</i>	-15°C to +50°C (5°F to 122°F)
<i>Storage temperature range</i>	-40°C to +70°C (-40°F to 158°F)
<i>Humidity</i>	Operating and storage 10% to 95%, non-condensing
<i>Encapsulation</i>	IP 54 IEC 359 (metal casing)
<i>Shock</i>	Operational: 25G, IEC 68-2-29
<i>Vibration</i>	Operational: 2G, IEC 68-2-6

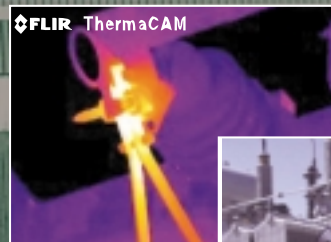
## PHYSICAL CHARACTERISTICS

<i>Weight</i>	2.0 kg (4.4 lbs.), excluding battery 2.4 kg (5.3 lbs.), including battery
<i>Size</i>	220mm x 133mm x 140mm (8.7"x5.2"x5.5")
<i>Tripod mounting</i>	1/4" - 20

## INTERFACE

<i>Remote-control options</i>	Remote focus (standard), RS-232 (standard) Remote control panel (optional)
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See, measure and document thermal problems clearly with the ThermoCAM PM 675 Predictive Maintenance System.



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