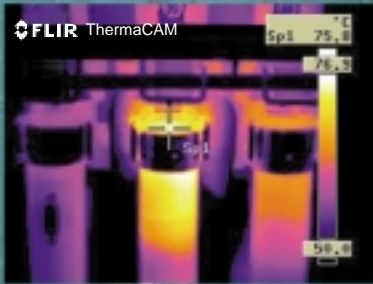


# THERMACAM<sup>®</sup> PM 695

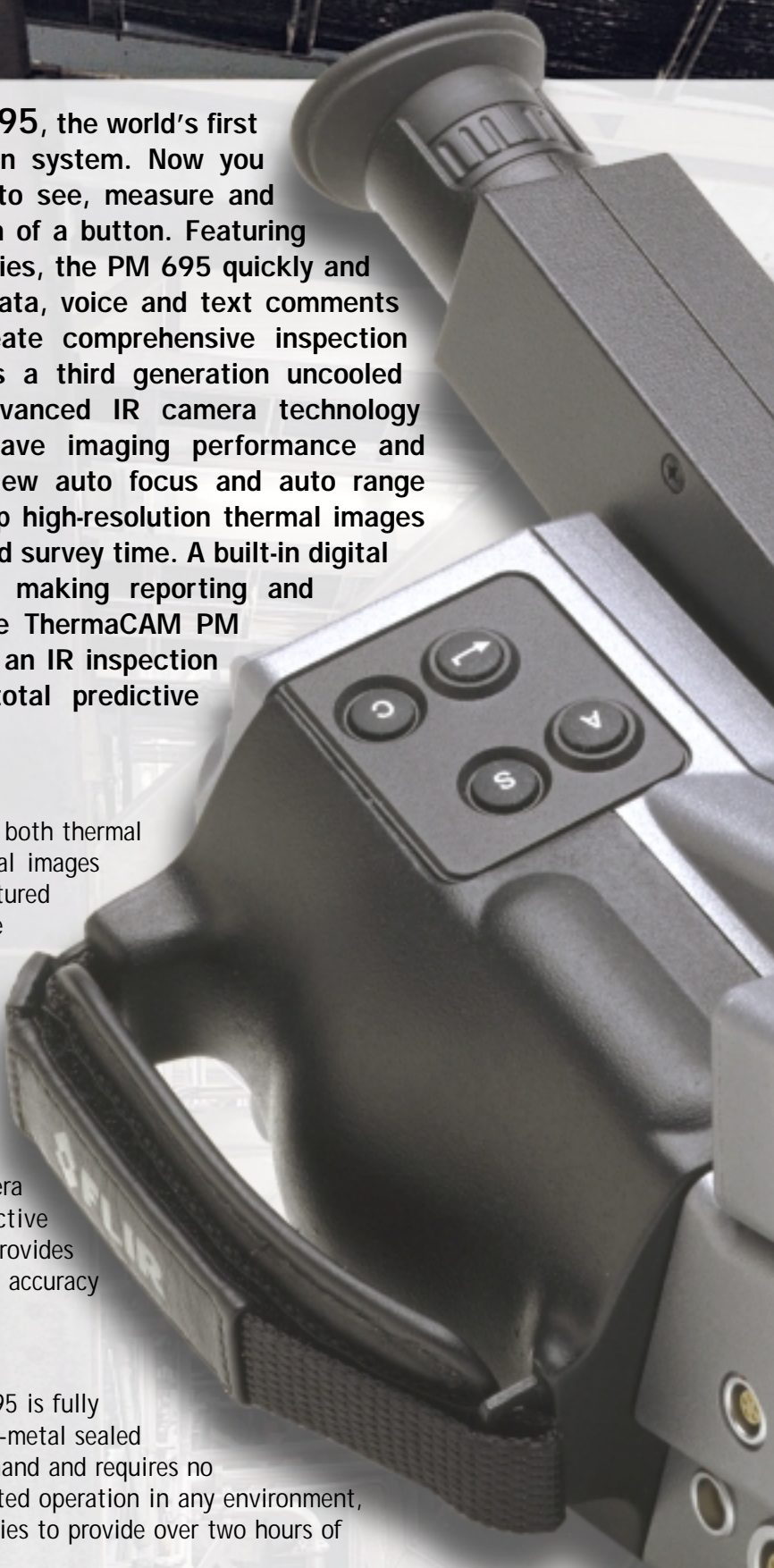


*High Performance Handheld Thermal Imaging System*

[FLIR PM695 Specs](#)  
Provided by [www.AAATesters.com](http://www.AAATesters.com)



**THE TOTAL  
PREDICTIVE  
MAINTENANCE  
SOLUTION**



Introducing the **THERMACAM® PM 695**, the world's first completely automated infrared inspection system. Now you can capture all the information needed to see, measure and document thermal problems at the touch of a button. Featuring both thermal and visual imaging capabilities, the PM 695 quickly and accurately records and stores images, data, voice and text comments together, allowing you to instantly create comprehensive inspection reports. The ThermoCAM PM 695 uses a third generation uncooled microbolometer detector, the most advanced IR camera technology available, providing outstanding longwave imaging performance and precision temperature measurements. New auto focus and auto range features produce perfectly adjusted, crisp high-resolution thermal images to help you see problems clearly and speed survey time. A built-in digital visual camera captures critical details making reporting and analysis easy. Rugged and handheld, the ThermoCAM PM 695 incorporates all the requirements of an IR inspection program in one system delivering a total predictive maintenance solution.



#### THERMAL AND VISUAL IMAGES

The PM 695 is the first radiometric camera to offer both thermal and visual imaging. High-definition 14-bit thermal images are simultaneously recorded with visual images captured by the PM 695's built-in digital camera. Avoid the need to carry extra digital and photographic cameras with you to record survey details.



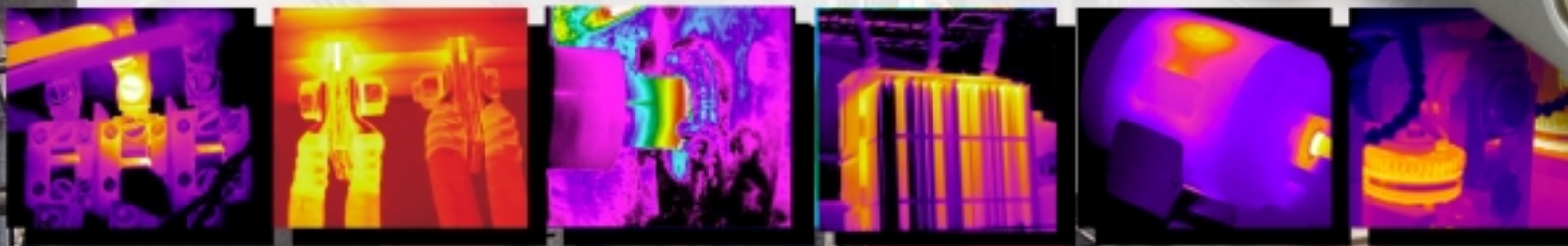
#### MAINTENANCE-FREE UNCOOLED LONGWAVE DETECTOR

Patented solid state third generation microbolometer sensor needs no cryogenic cooling, making it the simplest and most reliable IR camera technology available. Perfect for most predictive maintenance applications, longwave technology provides superb image quality, high precision measurement accuracy and solar reflection immunity.



#### RUGGED PORTABILITY

Designed for use in harsh environments, the PM 695 is fully ruggedized and meets IP 54 standards. With an all-metal sealed camera body, the PM 695 fits comfortably in one hand and requires no external cables to operate. For reliable, uninterrupted operation in any environment, ThermoCAM uses long-life, no-memory NiMH batteries to provide over two hours of continuous use.



## AUTOMATIC OPERATION

Fully automated features simplify the predictive maintenance process—from capturing images to documenting results in easy-to-understand reports. Capture the details clearly using the PM 695's revolutionary auto focus, auto range, and auto span features. The PM 695 automatically does the work for you and delivers the data you need to document results and make critical decisions.

## PRECISION TEMPERATURE MEASUREMENT

Evaluate the thermal condition of equipment on the spot and make accurate non-contact measurements from  $-40^{\circ}$  to  $2000^{\circ}\text{C}$ . With five measurement modes, the PM 695 provides powerful and flexible temperature analysis. Emissivity QuickSelect™ takes the guesswork out of selecting emissivity values by providing a drop-down list of common materials to be inspected.

## EASY-TO-USE

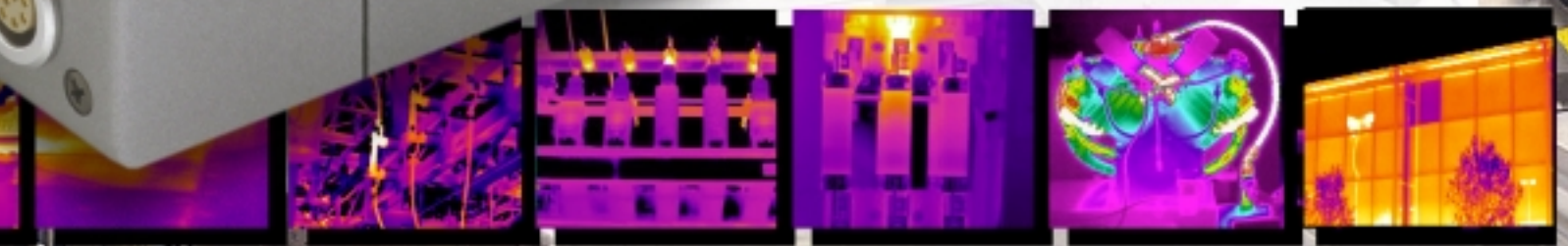
The PM 695 defines point-and-shoot simplicity and provides immediate results. Press one button and obtain perfectly focused and adjusted thermal and visual images; press again and store images to the removable PC card. Clearly identify problems while viewing crisp and highly detailed images on a built-in color viewfinder or optional large-format LCD panel. With automatic features, instant-on operation, multi-lingual capabilities, and intuitive ThermaCAM® Reporter™ software interface, the PM 695 offers a total predictive maintenance solution.

## DIGITAL IMAGE, VOICE AND TEXT ANNOTATION

Speed through surveys with fool-proof image and data storage. Embed up to 30 seconds of voice comments with each image file. Select and edit report text in the field from pre-loaded choices in the PM 695. Analysis functions, text and voice comments are digitally stored with thermal and visual camera images in the field, and then automatically downloaded into professional reports.

## FULLY AUTOMATED REPORT GENERATION

Documenting results has never been simpler. From capturing images in the field to final report, FLIR offers the most efficient, automated inspection reporting solution available. The seamless integration of the PM 695 camera and ThermaCAM Reporter Software ensures that field inspection data is quickly and automatically transformed into a maintenance report. Drag and drop image files containing all field inspection results onto the QuickReport™ icon and instantly create comprehensive maintenance reports.



# THERMACAM PM 695 TECHNICAL SPECIFICATIONS

## IMAGING PERFORMANCE

### THERMAL

Field of view/min focus distance	24°x18° /0.5m
Spatial resolution (IFOV)	1.3 mrad
Thermal sensitivity	0.08°C at 30°C
Image frequency	50/60 Hz non-interlaced
Electronic zoom function	4X continuous
Detector type	Focal Plane Array (FPA), uncooled microbolometer 320 x 240 pixels
Spectral range	7.5 to 13µm
Digital image enhancement	Standard

### VISUAL

Built-in digital video	640 x 480 pixels, full color
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## IMAGE PRESENTATION

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

## MEASUREMENT

Temperature range	-40°C to +120°C (-40°F to +248°F), Range 1 0°C to +500°C (+32°F to +932°C), Range 2 Up to +1500°C (2732°F), optional Up to +2000°C (3632°F), optional
Measurement modes	Spot (up to 5), area (up to 5), isotherm, line profile, Delta T
Accuracy	±2°C, ±2%
Atmospheric transmission correction	Automatic, based on inputs for distance, atmospheric temperature and relative humidity
Optics transmission correction	Automatic, based on signals from internal sensors
Automatic emissivity correction	Variable from 0.1 to 1.0 or select from listings in pre-defined materials list

## IMAGE STORAGE

Type	High capacity PC-Card, ATA compatible (160MB min)
File formats - THERMAL	14-bit radiometric IR digital image (IMG), includes header file with all radiometric data 8-bit standard bitmap (BMP), image only or image w/screen graphics Every image stored in both formats
File formats - VISUAL	Standard bitmap (BMP); visual images(s) linked with corresponding thermal images(s)
Voice annotation of images	30 sec. of digital voice "clip" stored together with the image
Text annotation of images	Predefined and field-editable text selected and stored with image. Up to 12 text fields/image

## LENSES (OPTIONAL)

Field of view/min focus distance	3x telescope (7° x 5.3° /6m) 2x telescope (12° x 9° / 2m) 0.5x wide angle (45° x 34° /0.3m) 0.3x wide angle (80° x 60° /0.2m) 200 µm resolution close-up lens (64mm x 48mm /150mm) 100 µm resolution close-up lens (32mm x 24mm /80mm)
Lens identification	Automatic

## BATTERY SYSTEM

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

## ENVIRONMENTAL SPECIFICATION

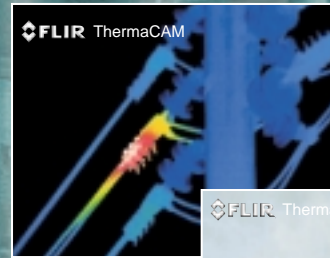
Operating temperature range	-15°C to +50°C (5°F to 122°F)
Storage temperature range	-40°C to +70°C (-40°F to 158°F)
Humidity	Operating and storage 10% to 95%, non-condensing
Encapsulation	IP 54 IEC 359 (metal casing)
Shock	Operational: 25G, IEC 68-2-29
Vibration	Operational: 2G, IEC 68-2-6

## PHYSICAL CHARACTERISTICS

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

## INTERFACE

Remote-control options	Remote focus (standard), RS-232 (standard) Remote control panel (optional)
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The ThermoCAM PM 695 is the first IR predictive maintenance camera to provide both thermal and visual imaging in one system.



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