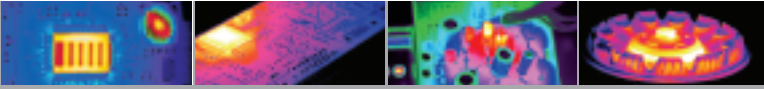




The Global Leader in Infrared Cameras

# ThermaCAM® SC3000

INFRARED CAMERA



QWIP FPA High-speed Infrared Imaging and Measurement System for Advanced Thermal Analysis.



- > Industry-best Proprietary QWIP Sensor
- > High-speed Data Acquisition
- > 14-bit High-resolution Images
- > Real-time Digital Recording & Analysis
- > Superior Thermal Sensitivity & Accuracy
- > Easy Data Export & Manipulation
- > Broad Dynamic Range
- > Ruggedly Built — Resists Dust & Moisture

## Unparalleled Thermal Precision

FLIR's proprietary Quantum Well Infrared Photo-detector (QWIP) Focal Plane Array (FPA) Sensor technology powers the most advanced IR detector available, providing outstanding image resolution and unparalleled temperature measurement precision.

## Advanced Technology

Ultra-high thermal sensitivity, extremely wide dynamic range, revolutionary long wave imaging performance and high-speed data acquisition capabilities make the SC3000 the most advanced solution for IR temperature measurement and thermal analysis in non-destructive evaluation, research and development, and product design.

## Exceptional Image Quality

QWIP technology is the most advanced long wave focal plane array functionality available, delivering advances in thermal sensitivity unrivaled by any other commercial IR camera. The SC3000 gives users exceptional image stability and uniformity – ideal for applications where precise temperature measurements and high thermal sensitivity are paramount.

## High-speed Data Capture & Analysis

Crisp high-resolution 14-bit images and thermal data are captured and stored at extremely high rates (up to 900Hz) on high capacity PC cards. Coupled with the ThermaCAM Researcher software package, the SC3000 enables quick, in-depth, extensive analysis of both static and real-time images. Plus, broad dynamic range functionality allows for analysis of individual frames that cover extremely wide temperature ranges, detecting minute thermal differences.

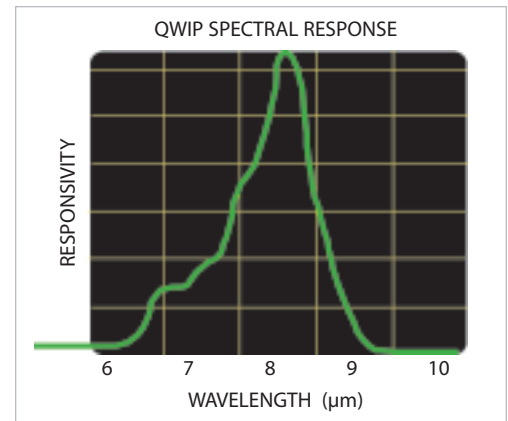
## A Multitude of Options

Multiple temperature ranges offer optimal measurement options for diverse applications, target size, distance and speed. A wide range of optics allows users to adapt the SC3000 to a variety of situations, and measure extremely small or distant targets without sacrificing image quality, resolution or sensitivity.



# ThermaCAM® SC3000 Technical Specifications

Imaging Performance	
Field of view/min focus distance	20°x15° /0.3m
Spatial resolution (IFOV)	1.1 mrad
Thermal sensitivity	20 mK at 30°C
Image frequency	50/60 Hz non-interlaced (standard), up to 750/900Hz (with Researcher HS option)
Electronic zoom function	4X continuous
Detector	
Type	GaAs, Quantum Well Infrared Photodetector (QWIP), 320x240 pixels
Spectral range	8 to 9µm
Detector Cooling	Stirling cooled to 70K, cool down time <6 minutes
Measurement	
Temperature range	-20°C to +1500°C (-4°F to 2732°F), 4 ranges Up to +2000°C (+3632°F), optional
Accuracy	±1% or ±1°C (for measurement ranges up to +150°C) ±2% or ±2°C (for measurement ranges above +150°C)
Atmospheric transmission correction	Automatic, based on inputs for distance, atmospheric temperature and relative humidity
Optics transmission correction	Automatic, based on signals from 5 internal sensors
Automatic emissivity correction	Variable from 0.1 to 1.0 or select from listings in pre-defined materials list
Image Presentation	
Video output	RS170 EIA/NTSC or CCIR/PAL composite, S-video, and 14-bit digital serial link
Image Storage	
Type	High capacity PC-Card, ATA compatible (160MB min)
File formats	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
Lenses (Optional)	
Field of view/min focus distance	2.5" Telescope (2.5" x 1.88"/45m) 5" Telescope (5.0" x 3.75"/10m) 10" Telescope (10.0" x 7.5"/2m) 106µm Close-up lens (34mm x 25mm/110mm) 31µm Microscope lens (10mm x 7.5mm/26mm)
Lens identification	Automatic
Power Input	
Voltage	12V DC, nominal
Power Consumption	22 watts
AC Adapter	Included
Environmental Specifications	
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 (metal casing)
Shock	Operational: 25G, IEC 68-2-29
Vibration	Operational: 2G, IEC 68-2-6
Physical Characteristics	
Weight	3.2 kg (7.0 lbs.)
Size	220mm x 135mm x 130mm (8.7" x 5.3" x 5.1")
Interface	
Remote-control options	Remote focus (standard), RS-232 (standard) Remote control panel (optional)
Sync	Gen Lock input



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