

Thermal Imaging Camera



OSXL-TIC Series



- ✓ Interchangeable Lenses
- ✓ Upper Temperature Range of 300°C (482°F)
- ✓ 160 x 120 (19,200) Pixel Focal Plane, OSXL-TIC104: 384 x 288 Array IR Detector
- ✓ Temperature Sensitivity of $\pm 0.08^{\circ}\text{C}$ ($\pm 0.14^{\circ}\text{F}$) or Better
- ✓ 100 mm (4") Minimum Focal Distance Allows Close-Up Work
- ✓ Included 2 GB MicroSD Card Stores Images for Later Uploading to PC
- ✓ USB 2.0 and Video Out Jacks
- ✓ Bright 89 mm (3.5") Diagonal Flip-Up Color LCD
- ✓ Bluetooth Headset for Voice Annotation (OSXL-TIC103)
- ✓ Variable Emissivity
- ✓ Tripod Mount (Optional Adaptor)
- ✓ Water, Dust and Oil-Resistant to IP54 Standard
- ✓ Shock and Vibration-Resistant
- ✓ Powered by Rechargeable Li-Ion Battery
- ✓ Up to 5 Hours of Operation Using 2 Batteries, AC Adaptor

The OSXL-TIC is ideal for revealing hidden heat-driven processes and problems. Applications include: equipment maintenance, repair and operations (MRO); building energy audits; process/manufacturing plant maintenance; water damage restoration; firefighting; navigation; surveillance.



Comes complete with 2 rechargeable li-ion batteries, compact battery charger, 2 GB miniSD memory card, SD card reader, video cable with BNC plug, USB 2.0 cable, bluetooth headset with charger (OSXL-TIC103 and OSXL-TIC104 only), lens cap, analysis and reporting software on CD, calibration certificate, hand straps, custom hard case and operator's manual on CD.



By converting objects' infrared (IR) radiation to visible color images, thermal imaging cameras make it possible to detect very small temperature differences from a distance. Heat signatures can help diagnose the cause of equipment failures and poor performance due to wear and tear, misalignments and fault conditions.



Specifications

Picture-In-Picture Mode

(Visual + Thermal Image Fusion):

OSXL-TIC101: No
**OSXL-TIC102, OSXL-TIC103,
 OSXL-TIC104:** Yes

Analysis Tools:

OSXL-TIC101: 2 moveable spots, isothermal analysis
OSXL-TIC102: 4 moveable spots, isothermal analysis
OSXL-TIC103 and OSXL-TIC104: 9 movable spots, isothermal analysis profile analysis, 5 area analysis

LED Flashlight:

OSXL-TIC101: No
**OSXL-TIC102, OSXL-TIC103,
 OSXL-TIC104:** Yes

Temperature Alarms:

OSXL-TIC101: No
**OSXL-TIC102, OSXL-TIC103,
 OSXL-TIC104:** Yes

Visual File Format:

OSXL-TIC101: Prop SAT/JPG
**OSXL-TIC102, OSXL-TIC103,
 OSXL-TIC104:** Prop SAT/CCD/JPG

Visual Image Display Resolution:

**OSXL-TIC101, OSXL-TIC102,
 OSXL-TIC103:** 320 x 240 pixels
OSXL-TIC104: 640 x 480 pixels

Thermal Video Streaming:

**OSXL-TIC101 and
 OSXL-TIC102:** No
OSXL-TIC103 and OSXL-TIC104: Yes (via USB), requires optional pro software

Voice Annotation:

**OSXL-TIC101 and
 OSXL-TIC102:** No
OSXL-TIC103 and OSXL-TIC104: Yes (via bluetooth)

IR Detector Resolution:

**OSXL-TIC101, OSXL-TIC102 and
 OSXL-TIC103:** 160 x 120 pixels (19,200 pixels)
OSXL-TIC104: 384 x 288 pixels (76,800 pixels)

Spatial Resolution:

**OSXL-TIC101, OSXL-TIC102 and
 OSXL-TIC103:** 2.2 mrad
OSXL-TIC104: 1.3 mrad

Thermal Sensitivity at 30°C (86°F):

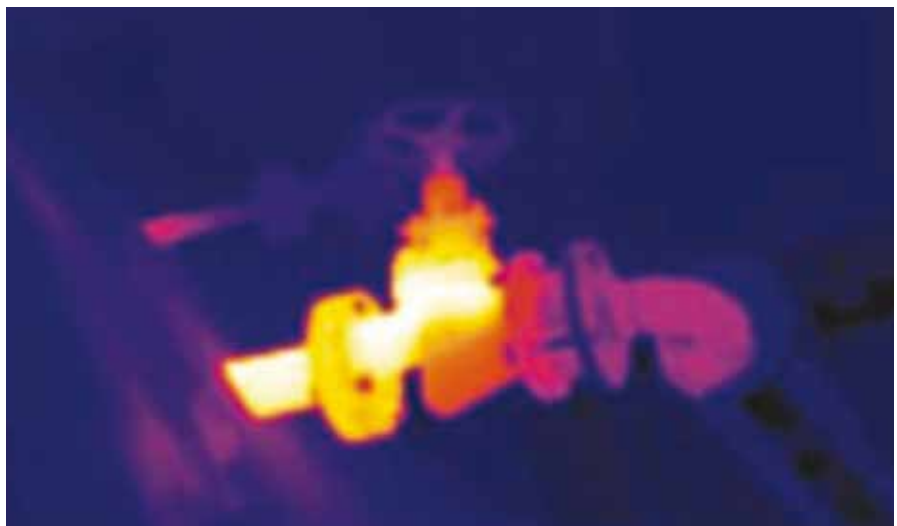
**OSXL-TIC101, OSXL-TIC102 and
 OSXL-TIC103:** 0.08°C (±1.4°F)
OSXL-TIC104: 0.04°C (±0.072°F)

Field of View:

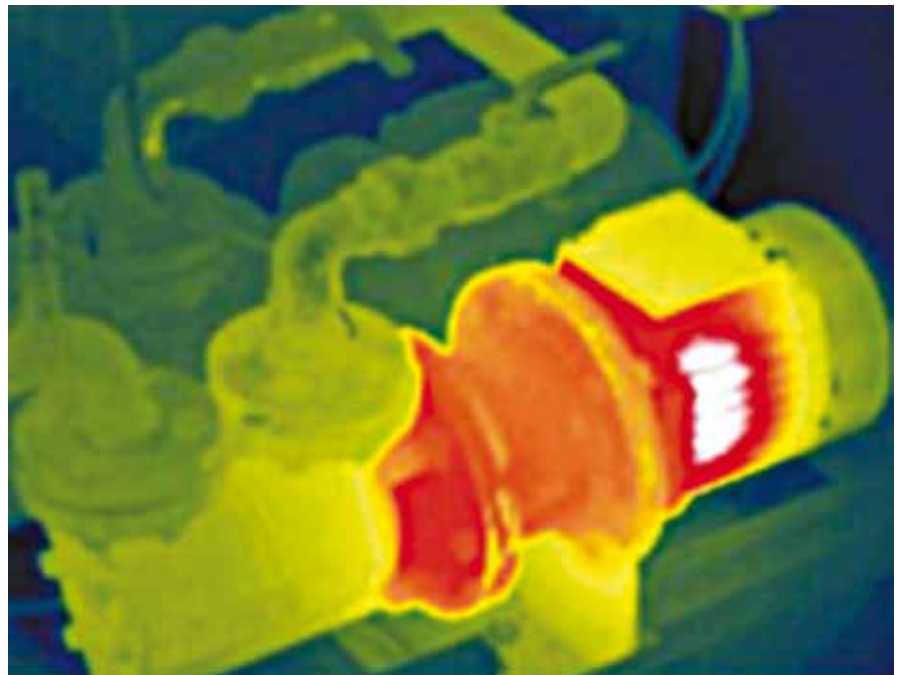
**OSXL-TIC101, OSXL-TIC102 and
 OSXL-TIC103:** 20 x 15°
OSXL-TIC104: 24 x 18°

Refresh Rate: 30 frames per second

Accuracy: ±2°C (±3°F) or 2% of rdg



A hot water valve (image taken in the dark)



Water pump motor

IR Detector Spectral Range: 8 to 14 μm

Laser Pointer: Yes

Temperature Measurement Range:

-20 to 300°C (-4 to 572°F), upgradeable to 1500°C (2732°F)

Detector Type: Uncooled focal plane array, manual focusing

Measurement Compensation

Factors: Emissivity, ambient temperature, humidity, distance

Focusing: Manual

Minimum Focal Distance:

100 mm (4")

Optional Telephoto and Wide-Angle

Lenses: Yes (6.4, 9 and 38° field of view available)

Display: Flip-up 89 mm (3.5") diagonal color LCD

Auto Hot/Cold Spot Indicator: Yes

Video Output Formats: NTSC, PAL

Color Palettes: Ironbow, iron-inverted, rainbow, feather, grey, grey-inverted

Image Storage Medium, Capacity:

2 GB miniSD memory card (included)

Thermal File Format: Proprietary SAT, radiometric, JPG

Text Input: No

Battery: Rechargeable lithium-ion

Total Charge Capacity: Up to 5 hours continuous with 2 batteries

Power Saver Mode: Yes

Operating Temperature: -20 to 50°C (-4 to 122°F) @ 10 to 90% RH

Water/Dust/Oil Resistance: IP54

Shock Resistance: Operational 25G

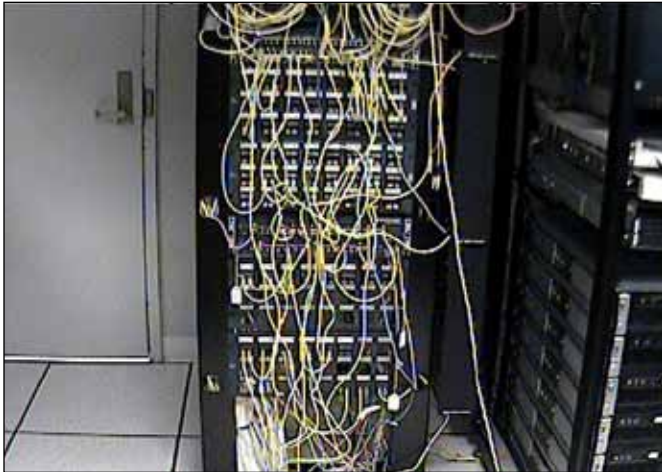
Vibration Resistance: Operational 2G

Weight: 580 g (1.3 lb)

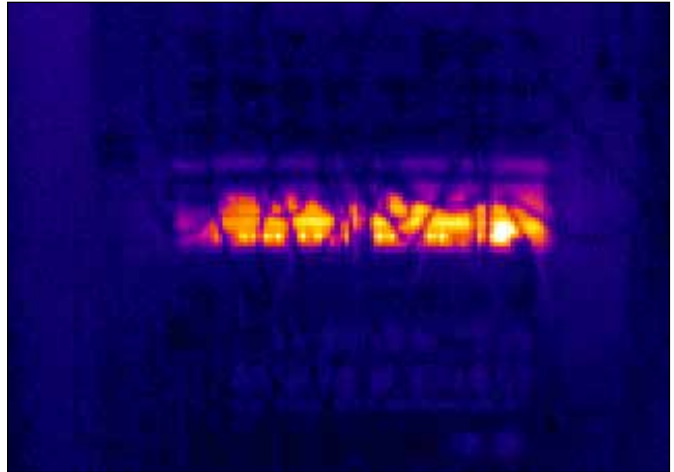
Dimensions: 172 x 80 x 162 mm (6.8 x 3.1 x 6.4")

Tripod Mount: Standard base (adaptor optional)

External Power Source: AC adaptor (optional)



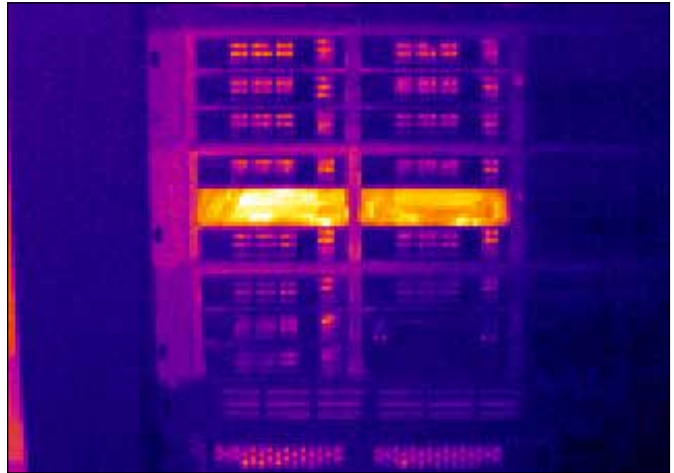
Optic image of a computer network rack system.



Thermal image of the same rack system.



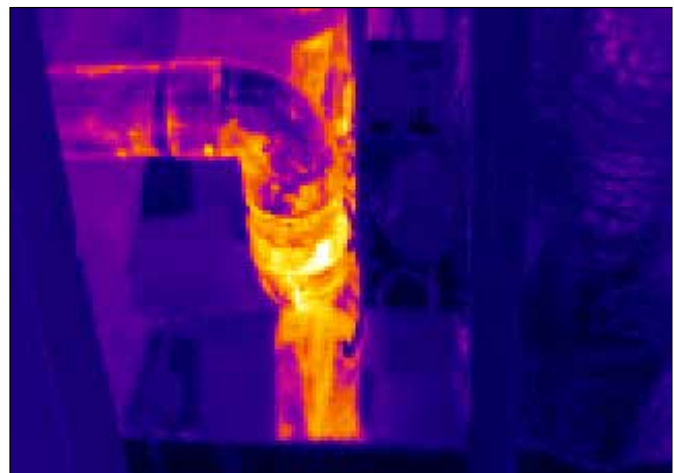
Optic image of a network hard drive rack.



Thermal image of the same rack.



Thermal image of a power supply.



Thermal image of a heating pipe.



Bottom Input/Output View



Keypad View

To Order Visit omega.com/osxl-tic for Pricing and Details

Model No.	Description
OSXL-TIC101	Thermal imager, 160 x 120 pixels (19,200 pixels)
OSXL-TIC102	Thermal and visual imager with picture-in-picture, 160 x 120 pixels (19,200 pixels)
OSXL-TIC103	Thermal and visual imager with picture-in-picture, streaming and Bluetooth headset for voice annotation, 160 x 120 pixels (19,200 pixels)
OSXL-TIC104	Thermal and visual imager with picture-in-picture, streaming and voice annotation, 384 x 288 pixels

Accessories

Model No.	Description
OSXL-TIC-AC	AC adaptor
OSXL-TIC-BATT	Replacement li-ion battery
OSXL-TIC-SOFT	Professional software
TRIPOD	Lightweight tripod expands 305 mm to 1.1 m (12 to 45")
OSXL-TIC12	Lens for OSXL-TIC101/102/103, 12° field of view
OSXL-TIC14	Lens for OSXL-TIC101/102/103, 14° field of view
OSXL-TIC28	Lens for OSXL-TIC101/102/103, wide angle lens 28° field of view
OSXL-TIC38	Lens for OSXL-TIC101/102/103, wide angle lens 38° field of view
OSXL-TIC4.8	Lens for OSXL-TIC101/102/103, telephoto lens with 4.8° field of view
OSXL-TIC6.4	Lens for OSXL-TIC101/102/103, telephoto lens with 6.4° field of view
OSXL-TIC9	Lens for OSXL-TIC101/102/103, telephoto lens with 9° field of view
OSXL-TIC104-12	Lens only OSXL-TIC104, 12° field of view
OSXL-TIC104-28	Lens only OSXL-TIC104, wide angle lens 28° field of view
OSXL-TIC104-48	Lens only OSXL-TIC104, wide angle lens 48° field of view

Comes complete with 2 rechargeable li-ion batteries, compact battery charger, 2 GB miniSD memory card, SD card reader, video cable with BNC plug, USB 2.0 cable, bluetooth headset with charger (OSXL-TIC103 and OSXL-TIC104 only), lens cap, analysis and reporting software on CD, calibration certificate, hand straps, custom hard case and operator's manual on CD.

Ordering Example: **OSXL-TIC101**, thermal imaging camera. **OCW-1**, OMEGACARESM extends standard 3-year warranty to a total of 4 years.