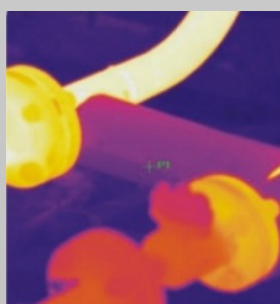# MTV-100
Thermal Imaging Camera

Overview:

MTV-100 with a high thermal sensitivity of 65mk can identify the smallest temperature differences between the objects and display it by excellent thermal images. As a potential fault always coming with the partial overheat / overcool, so the user can locate the overheated / overcooled part with a Marmonix Thermal Imaging Camera instantaneously, and more details about the fault will be found by assistance of our professional Thermal Imaging Analysis Software.

Features:

- Excellent thermal image and high accuracy temperature measurement
- Wide temperature measurement range
- Laser pointer
- Built-in microphone to record 40sec voice annotation
- Exchangeable IR lenses for more flexibility
- High temperature measurement option
- Automatic Hot/Cold/Average spot recognition
- Intuitive and easy operating menu

Application:

-Building diagnostics
-Electrical and mechanical inspection
-Research & Development
-Automation applications
-Preventative & predictive maintenance

Detector Data	
Detector type	Focal plane array(FPA), Uncooled Microbolometer
IR resolution	160 x 120 pixels
Pixel pitch	$25\mu m$

IR Imaging and Optical Data	
Spectral range	$8\text{-}14\mu m$
Field of view (FOV)/min focus	$21°x\ 16°/0.15m$(standard lens)
distance	$35°x\ 27°/0.05m$ (wide angle lens, optional) $4°\ x\ 3°\ /0.8m$ (telephoto lens, optional)

Image Presentation	
Spatial resolution (IFOV)	2.3mrad (standard lens)
Thermal sensitivity (NETD)	<65mk at 30℃
Image frequency	50/60Hz
Focus	Manual
Electronic zoom	2x
Display	Built-in 3.5" color LCD

Measurement	
Temperature range	-20℃ to +120℃ / 0℃ to +350℃(switchable) Up to 1200℃(optional)
Accuracy	±2℃ or ±2% of reading
Measurement spot	Up to 4 moveable spots
Measurement area	Up to 3 moveable boxes, automatically capture maximum minimum, average temperature
Line profile	Vertical, horizontal
Isotherms analysis	Detect high/low temperature/interval
High temperature alarm	Voice, color
Emissivity correction	Adjustable from 0.01 to 1.0
Temperature correction	Auto
Multiple Language Menu	10 Languages (English, French, Italian, German, Spanish, Portuguese, Russian, Korean, Japanese, Simplified Chinese & Traditional Chinese)

Image Storage	
Storage type	Built-in flash card, up to 1500 images
Files format	Standard JPEG, 14-bit measurement data included
Voice comments	40s voice record, stored with per image via built-in microphone

Laser Indication	
Classification type	Class 2, 1mW/635nm Red

Power System	
Battery type	Rechargeable and replaceable Li-ion battery
Battery operating time	Approx 3 hours
Power saving	User defined

Environment Data	
Operating temperature range	-20℃ - +50℃
Storage temperature range	-40℃ - +70℃
Humidity (operating and storage)	≦90%non-condensing
Shock	25G IEC68-2-29
Vibration	2G IEC68-2-26

Physical Data	
Size (L x W x H)	330mm × 95mm × 86mm
Weight	650g
Tripod mounting	1/4 ″ -20

Interfaces	
External DC input	Yes
Audio output	Yes
Video output	PAL / NTSC
USB	Images transfer to PC

Package Includes	
Standard	Thermal imaging camera with standard IR lens, 2 Li-ion batteries, battery charger, adapter, Video cable, USB cable, Software CD, instruction, warranty card, transport case
Optional accessories	Li-ion battery, IR lens