



# Thermal camera E20

High-resolution thermal camera for plant and building inspections

*IP54: Water splash and dust protected*

Plant and building inspectors can quickly and easily detect troublesome hot and cold spots with the user-friendly Thermal Camera E20. Equipped with a high-resolution thermal detector of **160×120** pixels and a visual camera, the E20 caters to a wide range of applications. A high thermal sensitivity of just 0.06 °C allows small temperature differences to be clearly displayed.

- A wide temperature measurement range of –20 to +350 °C makes the E20 suitable for many proactive maintenance programmes and high temperature applications.
- High thermal sensitivity enables applications, such as air ingress and building moisture, to be easily visualised where small temperature variations matter.
- Visual and audible temperature limit alarm function alerts the user to abnormal conditions.
- Automatic hot and cold spot cursors quickly pinpoints the extremes in a scene.
- Up to five moveable temperature cursors/areas with individual emissivity settings for analysing complex scenes.
- Temperature difference of two cursors can be displayed on screen enabling quick and easy temperature comparisons.
- Isotherms, temperature gradients and area analysis boxes for advanced scene analysis.
- Built-in emissivity tables allow for easy emissivity value setting.
- Eleven selectable colour pallets for ease of use.
- Images can be voice annotated for later reviewing with the PC software.

- Video output function allows the live image to be shown on an external display, useful when showing to a group of people.
- Fully radiometric thermal and visual images are stored on the micro SD card provided.
- Supplied with two standard camcorder batteries and with an independent charger, allowing for long field usage.
- Rugged construction and, with an IP 54 rating, enabling use almost anywhere.
- Comprehensive PC software suite for an unlimited number of users enables advanced image analysis and professional report writing.

- Technical data

Items		Technical Specification
		E20
Detector characteristics	Detector type	Un-cooled FPA micro-bolometer
	Array size/format	160×120
Image characteristics	Field of view/min focus distance	25°×19°/0.1m
	Spatial resolution(IFOV)	2.72mrad
	Thermal sensitivity	≤0.06°C@30°C
	Frame frequency	50/60Hz
	Focus	Manual
	Spectral range	8-14um
Image display	LCD display	3.5" TFT LCD, 640 x 480
Measurement	Temperature ranges	-20°C- +350°C
	Accuracy	± 2 °C or ± 2% of reading, Whichever is greater
	Measurement correction	Automatic / manual
	Measurement mode	1 movable spots, Hottest spot/coldest spot tracking,1 movable areas (maximum, minimum and average temperatures),Alarm(voice, color)
	Image control	6 color palettes changeable
		Image adjustment Auto/manual gain and brightness
	Setup functions	Date/time, temperature unit, language
	Emissivity correction	Variable from 0.01 to 1.0

	Background temperature correction	Automatic corrections according to user input
	Atmospheric transmission correction	Automatic correction according to user input object distance, humidity and temperature
Image storage	Storage card	8G SD card, max 16G
	Storage mode	Manual/Auto single file saving
	File format	Thermal: JPEG with original thermal measurement data included
Power source	Battery type	Li-Ion, rechargeable
	Battery operating time	3 hours continuous operation
	Battery charging mode	Intelligent charger or power adaptor 12V(optional) to random charge
	Power saving	Auto-sleep and auto-shut down
	External power	10-15V DC
Environment	Operating temperature	-15°C-- +50°C
	Storage temperature	-40°C-- +70°C
	Humidity	Operating and storage:≤90% non-condensing
	Encapsulation	IP54
	Drop test	2m
	Anti-shock	25G,IEC68-2-29
	Vibration resistance	2G,IEC68-2-6
Physical characteristics	Weight	980g
	Dimension	105*245*230mm
Interface	SD card slot	Micro SD card slot
	External DC input	YES
	Video output	YES
	USB	Image, measurement data transfer
	Tripod	1/4"-20-UNC