160x 120 High Performance Thermal Imagers



9873 160x120 Thermal Imager is basic one only with full IR, 9875/9877 160x120 High Performance Ther mal Imager is esay to help you to ind the potential problems with innovation features and functionality,





for additional following:

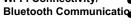
• 160x120 High Performance Thermal Imager with high resolution TFT color LCD display

you can perform infrared inspections faster and more eficiently and thoroughly document problem areas

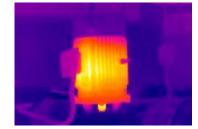
- Professional IR-optical focus system ensures that images are in good focus for optimum image clarity and scanning convenience.
- Capture additional measurements fast and conveniently with wireless modules (9877 only)
- Meterbox analysis system—quickly identify and keep track of inspection locations by adding digital images of important information and surrounding areas
- Find problems faster and easier with accurately identify potential issues by combining digital
- Picture in Picture function Displays thermal image super-imposed over a digital image
- LED Flashlight allows the visual camera and fusion to be used in poorly lit environments
- Wide Temperature Range from -20°to +400°C targeting electrical and industrial applications
- ±2% Accuracy for reliable temperature measurement
- The image rotation has the ability to automatically rotate the acti19ve image
- Audio recorded with the video image acts a speaker to listen to audio recorded with the video image
- Capacitive touch screen is easier, productive and effective to operate it
- Lithium polymer Rechargable Battery lasts >4hrs continuous use; replaceable
- An easy-to-access thumbnail image gallery helps you to quickly review and ind your thermal images.
- Area (Min/Max) Mode shows the Minumum or the Maximum Temperature reading in the selected area
- A conveniently located button activates the laser pointer that will help you associate the hot or cold spot in the thermal image with the real physical target in the ield.
- In order to adapt the device to every situation both wide angle and tele-lenses are available.

• Equipped with standard video, USB outputs as well as a removable SD card.

Bluetooth Communication The IR video can be streamed to a PC via USB or wii (DT-9877 only).







Full Infrared Picture-in-Picture





Color Alarm

Full visible light



33mm Lens 22mm Lens

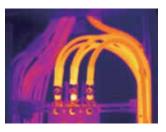
**RL-22** 

**RL-33** 

Size(HxWxD): 243mm x 103mm x 160mmWeight: 920g Accessories: Hard transport case (9875,9877), 7.5mm lens, Sun Visor, Tripod base, AC charger/Power supply, Earphone, Battery, Camera lens cap, software CD-ROM, Handstrap, micro SD card, USB cable & RCA cable, Gift box.

Speciications		9871	9873B	9873	9875	987
Imaging and optical data						
IR resolution	160x120pixels, focal plane array (FPA), uncooled microbolometer	80x80	*	*	*	*
Field of View (FOV)	29.8 × °22.6°	17°x17°	*	*	*	*
Minimum focus distance	0.2m (0.66ft.)	0.3m (0.99ft.)	*	*	*	*
Spatial resolution	(IFOV) 3.33 mrad	3.78mrad	*	*	*	*
Thermal sensitivity/NETD	>0.08°C @ +30°C (+86°F) / 80 mK	>0.1°C	*	*	*	*
Image frequency	50Hz	*	*	*	*	*
Focus	Manual	•				
Zoom	1-20x continuous, digital zoom	*	*	*	*	
Rotate	0-360°, continuous change by 1°	*	*	*	*	. *
Image presentation						
Display	3.5" TFT, capacitive touch screen	*	*	*	*	*
Image modes	IR image, visual image, picture in picture	IR image	only	*	*	*
Picture in Picture	IR area on visual image or visual image area on II	R None		*	*	*
Color palettes	GRAY/GRAY IRON/IRON/RAINBOW/FEATHER	*	*	*	*	*
Measurement						
	Low range: -20°C to +150°C (-4°F to +302°F)				*	
Object temperature range	High range: 0°C to +400°C (+32°F to +752°F)	*	*	*	*	*
Accuracy	±2°C (±3.6°F) or ±2% of reading	*	*	*	*	*
Measurement analysis	3					
Spotmeter	3	*	*	*	*	*
Emissivity adjustable	0.01~1.0 Adjustable	*	*	*	*	*
Emissivity table	Emissivity table of predeined materials	*	*	*	*	*
Line		None		*	*	*
Area	2 lines(horizontal and vertical)	None		*	*	*
	3 boxes with max. /min. /average	*	*		*	
	Auto hot or cold spotmeter marks					
Isotherm	Detect high/low temperature/interval	None	!	^		
Measurement corrections	Emissivity, ambient temperature, distance, relative humidity, offset temperature	*	*	*	*	*
Set-up				*	*	
Laser / loodlight	< class2 / white LED loodlight	None		^	-	1
Set-up commands	Local adaptation of units, language, date and time formats, information of camera		*	*	*	*
Language selection	English, Chinese, French, German, Spanish	*	*	*	*	*
Storage of videos/images						
Storage media	4Gbytes Micro SD card	*	*	*	*	*
Video storage format	Standard MPEG-4 ,640x480@30fps, on memory <60 minutes	card *	*	*	*	*
Image storage format	Standard JPEG, including measurement data, on memory card > 1000 pictures	*	*	*	*	*
Storage mode	IR/visual images; simultaneous storage of IR and visual images	IR image	only	*	*	*
Digital camera						
Built-in visible light digital	640x480 Pixels	None			*	
camera	040X460 PIXEIS	None	•			
Data communication interfa	aces					
USB interfaces	USB-mini, data transform between camera and P	C *	*	*	*	*
USB interfaces	remote control, live video		None	•		*
Wi-Fi connectivity	Wi-Fi connectivity allows to send images a data to mobile devices mote control, live video	ind	None	e		*
Video out	Composite(PAL and NTSC)	*	*	*	*	*
Power system		*	*			
Battery	Lithium polymer battery, 4 hours operating time		*	*	*	*
Input voltage	DC 9V to 12V	* 1	*	*	*	*
Charging system	In camera (AC adapter)	*	*	*	*	*
Power management	Automatic shutdown and sleep mode (user select	able) *	*	*	*	*
Environmental data						
Operating temp range	-20°C to +50°C (-4°F to +122°F)	METERTOOLS.	R *)	*	*	*
Storage temp range	_10°C to +70°C (_10°E to +158°E)	*	*	*	*	*
Relative humidity (operating	\\/\\/\\/\ mo	terto	OS.	ır.		
and storage)	10%RH~90%RH				*	*
Encapsulation	P65 +98-21-	0012	139	0 *	*	*
Drop test	2m www.cem-in	strument	s.com	1 *	*	*
Bump	25g(IEC60068-2-29( E-mail:info@				*	*
Vibration	2g(IEC60068-2-6(	ymeterio	*	*	*	*











## **Applications**

- Plant/General Maintenance
- HVAC/R
- Transportation/Automotive
- Cooling and Reheating
- Serving areas
- Food service Equipment
- Cold storage