

Keysight U5850 Series TrueIR Thermal Imagers

Get four times better resolution with today's hottest imagers

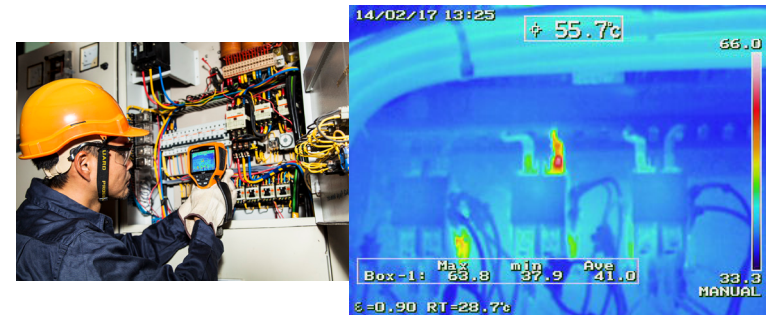
Detect potential problems faster with higher resolution and affordability of our TrueIR series of thermal imagers. Only from Keysight can you get a 320x240 fine resolution thermal imager with image logging and temperature trending capability at a lower price than the typical 320x240 thermal imager.



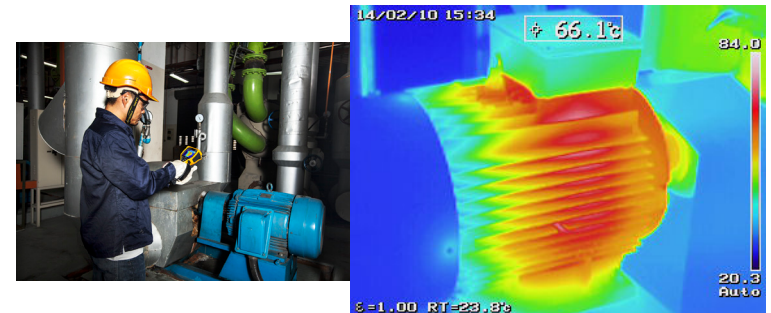
1. Flash light
2. Laser pointer
3. Visible image camera
4. Infrared (IR) image camera lens (with shutter)
5. Focus adjustment ring
6. Camera trigger key
7. DC power inlet
8. Video out port
9. USB mini-B port
10. SD memory card slot
11. Adjustable hand strap (for right-handed or left-handed use)
12. Quick access buttons
13. Large 3.5" color LCD display

Features

- Identify abnormalities faster with four times more in-camera fine resolution
- Monitor temperature changes through image logging and temperature trending capabilities
- Ability to focus on objects as close as 10 cm away
- Compact, lightweight, ergonomic
- High temperature range (up to 1200 °C)
- Easy-to-use customizable color palette
- Configurable quick access buttons to easily change settings with one hand
- Long product warranty - 3 years



Predictive maintenance on electrical systems



Predictive maintenance on electromechanical systems

Basic performance	U5855A	U5856A	U5857A
Temperature measurement range	-20 to 350 °C	-20 to 650 °C	-20 to 1200 °C
Thermal sensitivity	0.07 °C (at 30 °C)		
Accuracy ¹	± 2 °C or ± 2%		
Detector type	Uncooled focal plane array (a-Si)		
Detector resolution	160 x 120 pixels		
Fine resolution (in-camera)	320 x 240 pixels		
Field of view (FOV)	28° (H) x 21° (V)		
Spatial resolution (IFOV)	2.1 mrad (with fine resolution)		
Spectral length	8 µm to 14 µm		
Frame rate	9 Hz		
Focal distance	10 cm to infinity		
Focus mechanism	Manual focus		
Image processing and enhancement	U5855A	U5856A	U5857A
Image enhancement/correction	Emissivity, reflected temperature, object distance, ambient temperature, humidity, transmissivity, averaging		
Digital zoom	4x		
Color palette	Rainbow, Iron, Hot Iron, Iris, Grayscale, inverted Grayscale, Custom	Rainbow, Lava, Iron, Hot Iron, Iris, Olive, Medical, Grayscale, inverted Grayscale, Custom	Rainbow, Lava, Iron, Hot Iron, Iris, Olive, Medical, Grayscale, inverted Grayscale, Custom
Image fusion	Picture-in-picture, blend		
Measurements and alarm	U5855A	U5856A	U5857A
Measurements	Center spot, 3 moveable spots, max/min tracking, delta temperature, 3 moveable boxes (with min/max/avg)		
Color alarm	High/low temperature in all areas Alarm zones: Above/below/inside/outside		
General specification	U5855A	U5856A	U5857A
Battery	Li-Ion rechargeable battery, 7.4 VDC, 2500 mAh		
Display	3.5" TFT		
Visible camera	3.1 MP		
Built-in LED flash light/Laser pointer	Available/Class 2		
Drop test	2 m		
IP rating	IP 54		
Dimensions (W x H x D)	95 x 250 x 85 mm		
Weight	0.746 kg (with battery)		
Warranty	3 years for product, 3 months for standard accessories otherwise specified		
Calibration cycle	1 year		
Language	English, French, German, Italian, Japanese, Korean, Portuguese, Russian, Spanish, Simplified Chinese, Traditional Chinese		

1. After a 1-hour warm up with calibration at 25 °C.

Recommended accessories

Part number	Description
U5751A	Power adapter (with power cord)
U5752A	Rechargeable Li-Ion battery
U5753A	External battery charger (2-bay)
U5761A	Video RCA to RCA interface cable, 2 m
U5762A	USB standard-A to mini type-B interface cable, 1 m
U5771A	Rugged carrying case, hard
U5772A	Hand strap, adjustable for right-handed and left-handed use

Recommended software



TrueIR Analysis and Reporting Tool

Downloadable from www.keysight.com/find/TrueIR_ART



Three-Year Warranty

www.keysight.com/find/ThreeYearWarranty

Keysight's commitment to superior product quality and lower total cost of ownership. The only test and measurement company with three-year warranty standard on all instruments, worldwide.

Keysight Assurance Plans

www.keysight.com/find/AssurancePlans

Up to five years of protection and no budgetary surprises to ensure your instruments are operating to specification so you can rely on accurate measurements.

Standard shipped accessories

- Power adapter with power cord
- Rechargeable Li-Ion battery
- SD memory card
- Video RCA to RCA interface cable, 2 m
- USB standard-A to mini type-B interface cable, 1 m
- Hand strap
- Rugged carrying case, hard
- Quick start guide
- Certification of calibration

For more information go to

www.keysight.com/find/truelRimager

