

VOLTCRAFT - TOP PERFORMANCE IN EVERY WAY

For more than 40 years, our product range has been dynamically adapting to the constant changes in the industry. We commit to offering first-class quality to our customers while delivering an excellent cost-performance ratio. This philosophy remains the cornerstone of Voltcraft's success.

WB-310 **Thermal Imaging Camera**

CE

Item no: 2890403

The product is a thermal imaging camera with laser pointer and LED light. Some uses include e.g., finding hot spots, energy leaks, structural defects, pipe blockages, and HVAC faults.



FEATURES

1 - 32x continuous, digital zoom // 8 colour palettes // Fixed focus // Auto power off // Center spot // Built-in 2 megapixel digital camera // Internal 3.5 GB EMMC, Max. 32 GB microSD card // IR image, Visual image, Auto fusion

TECHNICAL DATA

Product power input

Input	5 V/DC 2.4 A
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*USB-C® input can be used to charge rechargeable battery or use product tethered to power supply without rechargeable battery inserted.

Rechargeable battery pack

Rechargeable battery	3.7 V 2600 mAh 9.62 Wh Li-ion
Battery life	max. 4 hrs

Infrared (IR) imaging performance

Objective (H x V)	42° x 32°
Resolution	160 x 120 pixels
Frequency	25 Hz
Thermal sensitivity / NETD	<0.05°C @ 30 °C (50 mK)
IFOV (spatial resolution)	4.62 mrad

Optics

Optical lens	f=2.6 mm, F1.1
Type	Infrared
Focal distance	min. 0.5 mm

Measurement

Temperature measuring range	-20 to +150 °C (-4 to +302 °F) +100 to +550 °C (212 to 1022 °F)
Temperature accuracy*	±2 °C (±2 °F) or ±2 % of reading
Resolution	0.1 °C
Emissivity	0.01 to 1.00 (adjustable)

*Tested between +10 to +35 °C, object temperature >0 °C.

Image processing enhancement

Alarms	High / low temperature in all areas Alarm modes: above / below / zone
Measurement corrections	Emissivity, reflected temperature, ambient temperature, atmospheric humidity, infrared compensation, distance
Measurements	Center spot
Image enhancement / correction	Histogram mode
Colour palettes	Iron, Rainbow, White hot, Black hot, Brown hot, Blue-red, Hot-cold, Feather

Image fusion	Thermal image, camera, auto fusion
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Visible light camera

Sensor resolution	2 MP
Digital zoom	1 - 32x

Display

Size	7.11 cm (2.8") LCD
Resolution	320 x 240 pixels
Touch screen	no

Storage and media

Internal storage	3.5 GB eMMC
MicroSD	Max. 32 GB
MicroSD file format	FAT 16 or 32
Image storage format	Standard JPEG, HIR files (includes data)
Image storage mode	Simultaneous image storage (IR and visual)
Image storage capacity	approx. 6000 images
Video format	320 x 240 pixels @ 30 fps, *.mp4
Video storage capacity	approx. 60 minutes

Laser pointer

Class	II
Wavelength	630 - 670 nm
Output power	max 0.4 mW
Colour	Red

LED light

Brightness	26 lm
Colour temperature	5000 K

Measurement units

Temperature	°C (Centigrade) °F (Fahrenheit), K (Kelvin)
Distance	m, ft

Language setting

Languages	English (default), German
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Data communication interface

USB Type-C®	Live video output, data transfer
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Wi-Fi	Data transfer, live video output, remote operation via mobile app
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Wi-Fi

Standard	IEEE 802.11 b/g/n, 2.4 GHz
Frequency range	2.412 - 2.462 GHz
Transmission power	16.5 dBm
Transmission distance	max. 20 m
Password (default)	12345678
SSID (default)	Device model number

Mobile application

Application name	Voltcraft Thermal Imaging
Supported OS	Android 6 (or above), iOS 13.0 (or above), iPad OS 13.0 (or above)
USB port support OTG	Required

Computer software

Supported OS	Windows® 7 (or above)
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Environment

Operating conditions	-15 to + 50 °C, 10 - 90 % RH (non-condensing)
Storage conditions	-40 to + 70 °C, 10 - 90 % RH (non-condensing)

Physical specifications

Dimensions (W x H x D)	75.5 x 101 x 235 mm
Weight	420 g

Emissivity table

Material	Emissivity	Material	Emissivity
Water	0.96	Tape	0.96
Stainless steel	0.14	Brass plate	0.06
Aluminium plate	0.09	Human skin	0.98
Asphalt	0.96	PVC plastic	0.93
Concrete	0.97	Polycarbonate	0.80
Cast iron	0.81	Oxidized copper	0.73
Rubber	0.95	Rust	0.80
Wood	0.85	Paint	0.90
Brick	0.75	Soil	0.93

CONTENTS

Thermal imager // Li-ion rechargeable battery // Power adapter (US/EU/UK/AU plugs) // MicroSD card (32 GB, U1 V10) // MicroSD to SD card adapter // USB-A to USB-C® cable // Windows® software CD-ROM // Carry case // Operating instructions //

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