

VOLTCRAFT

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-420 **Thermal Imaging Camera**

CE

Item no: 2890411

The product is a thermal imaging camera with touch screen display. Some uses include e.g., finding hot spots, energy leaks, structural defects, pipe blockages, and HVAC faults.



FEATURES

25 Hz Thermal imaging camera // Temperature reading range -20 up to 550 °C // 256 x 192 Pixel Bolometer matrix // Thermal sensitivity 50 mK // Display: 89 mm (3.5") LCD touch screen, 640 x 480 pixels // 2-in-1 visual camera and thermal imaging camera // 12 colour palettes // Wi-Fi function for data transfer and live video output via app //

TECHNICAL DATA

Product power input

Data	Item No.: 2890411
Input*	5 V/DC 2.4 A

*USB-C® input to charge rechargeable battery or to use product tethered to power supply without rechargeable battery inserted.

Power adaptor

Data	Item No.: 2890411
Input	100 - 240 V/AC, 50/60 Hz 0.8 A
Output	5 V/DC 2.4 A

Rechargeable battery pack

Data	Item No.: 2890411
Rechargeable battery	3.7 V 2600 mAh 9.62 Wh Li-ion
Battery life	max. 4 hrs

Battery charging cradle

Data	Item No.: 2890411
Input	5 V/DC 2.4 A

Infrared (IR) imaging performance

Data	Item No.: 2890411
Objective (H x V)	40.4° x 30.3°
Frequency	25 Hz
Thermal sensitivity / NETD	<0.05°C @ 30 °C (50 mK)
IFOV (spatial resolution)	5.48 mrad

Optics

Data	Item No.: 2890411
Optical lens	f=3.2 mm, F/1.1
Type	Infrared
Focus mechanism	focus free
Focal distance	min. 0.5 mm

Measurement

Data	Item No.: 2890411
Temperature measuring range	-20 to +150 °C (-4 to +302 °F) 0 to +550 °C (32 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

Data	Item No.: 2890411
Analysis features	Point analysis, line analysis, area analysis

Data	Item No.: 2890411
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, 3 moveable spots, max. / min. tracking, 2 line analysis, 3 moveable boxes (min. / max. / avg.)
Image enhancement / correction	Histogram mode
Colour palettes	Iron, Rainbow, White hot, Black hot, Brown hot, Blue-red, Hot-cold, Feather, Above alarm, Below alarm, Zone alarm, Vision zone
Image fusion	Thermal image, picture-in-picture, camera, auto fusion

Visible light camera

Data	Item No.: 2890411
Sensor resolution	2 MP
Digital zoom	1 - 32x

Display

Data	Item No.: 2890411
Size	8.89 cm (3.5") LCD
Resolution	640 x 480 pixels
Touch screen	Yes (capacitive)

Storage and media

Data	Item No.: 2890411
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	640 x 480 pixels @ 30 fps, *.mp4
Video storage capacity	approx. 60 minutes

Measurement units

Data	Item No.: 2890411
Temperature	°C (Centigrade) °F (Fahrenheit), K (Kelvin)
Distance	m, ft

Language setting

Data	Item No.: 2890411
Languages	English (default), German

Data communication interface

Data	Item No.: 2890411
USB Type-C®	Live video output, data transfer, settings and configuration via PC software
Wi-Fi	Data transfer, live video output, remote operation via mobile app

Wi-Fi

Data	Item No.: 2890411
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

Data	Item No.: 2890411
Password (default)	12345678
SSID (default)	Device model number

Mobile application

Data	Item No.: 2890411
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

Data	Item No.: 2890411
Supported OS	Windows® 7 (or above)

Environment

Data	Item No.: 2890411
Operating conditions	-15 to + 50 °C, 10 - 90 % RH (non-condensing)
Storage conditions	-40 to + 70 °C, 10 - 90 % RH (non-condensing)

Physical specifications

Data	Item No.: 2890411
Dimensions (W x H x D)	94 x 232 x 110 mm
Weight	450 g

EQUIPMENT

Zoom: 1 - 32x continuous, digital zoom // 12 colour palettes: Iron, Rainbow, White hot, Black hot, Brown hot, Blue-red, Hot-cold, Feather, Above alarm, Below alarm, Zone alarm, Vision zone // Focus free // Auto power off // Spot: center spot, 3 manual spots // High and low temperature alarm // High and low temperature tracking // Built-in 2 megapixel digital camera // Media storage: Internal 3.5 GB EMMC, Max. 32 GB microSD card // Image mode: thermal image, picture in picture, camera, auto fusion

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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