



# THERMAL IMAGING CAMERA

## MODEL : HD1BS



HD1BS is designed for temperature measurement to find invisible faults. It's equipped with a  $160 \times 120$  resolution thermal detector. The thermography ranges from  $-20^{\circ}\text{C}$  to  $550^{\circ}\text{C}$  ( $-4^{\circ}\text{F}$  to  $1022^{\circ}\text{F}$ ). Which meets most situation. It helps the staff to quickly find the fault according to accurate temperature measurement of high temperature targets in the environment. Meanwhile it provides assistant decision and ensure safety. The device is mainly applied to various industries, such as building, HVAC, and auto industry.



### Key Features :

- Thermal resolution:  $160 \times 120$  (19,200 pixels)
- NETD:  $< 40 \text{ mK}$  (@  $25^{\circ}\text{C}$ , F# = 1.0)
- Temperature measurement range :  $-20^{\circ}\text{C}$  to  $550^{\circ}\text{C}$  ( $-4^{\circ}\text{F}$  to  $1022^{\circ}\text{F}$ )
- Accuracy: Max. ( $\pm 2^{\circ}\text{C}/3.6^{\circ}\text{F}, \pm 2\%$ ), for ambient temperature  $15^{\circ}\text{C}$  to  $35^{\circ}\text{C}$  ( $59^{\circ}\text{F}$  to  $95^{\circ}\text{F}$ ) and object temperature above  $0^{\circ}\text{C}$  ( $32^{\circ}\text{F}$ )
- Measurement Presets: Center spot, Hot spot, Cold spot, User Preset Point
- 25 Hz image frequency
- 3.2" LCD screen display
- Up to 8 hours continuous running

Solutions for measurement



**HD**<sup>®</sup>  
ISO 9001:2015  
Certified Company



## Specification :

### Thermal Module

Image Sensor	Vanadium Oxide Uncooled Focal Plane Arrays
IR Resolution	160 × 120 (19,200 pixels)
Pixel Pitch	17 μm
Spectral Range	8 to 14 μm
NETD	< 40 mK (@25°C), F# = 1.0
Focal Length	3.5 mm
FOV (Field of View)	32.9° × 44.4°
Image Frequency	25 Hz
Focus	Fixed
IFOV (Spatial Resolution)	4.85 mrad
Aperture	F1.1
Minimum Focus Distance	0.3 m (0.98 ft)

### Image Display

Display	320 × 240 Resolution, 3.2" LCD Screen
Color Palettes	White Hot, Black Hot, Rainbow, Ironbow

### Measurement and Analysis

Object Temperature Range	-20°C to 550°C (-4°F to 1022°F)
Accuracy	Max. (± 2°C/3.6°F, ± 2%), for ambient temperature 15°C to 35°C (59°F to 95°F) and object temperature above 0°C (32°F)
Measurement Presets	Center Spot, Hot Spot, Cold Spot, Point Presets, Off
High Temperature Alarm	Audible Warning

### Storage

Storage Media	EMMC (4 GB)
Image Storage Capacity	30,000 Images
Image File Format	JPEG with Measurement Data Included

### Functions

Wi-Fi	802.11 b/g/n (2.4GHz)
UVC Cast Screen	Yes
Level/Span	Auto/Manual

### Power System

Power Supply	3.7 VDC/0.4 A
Power Consumption	1.5 W
Battery Type	Rechargeable Li-ion Battery
Battery Operating Time	8 Hours Continuous Running

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#### General

Menu Language	21 Languages English, German, French, Spanish (Spain), Portuguese (Portugal), Italian, Czech, Slovak, Polish, Hungarian, Romanian, Dutch, Danish, Norwegian, Finnish, Swedish, Russian, Turkish, Japanese, Korean, Chinese (Traditional)
Working Temperature Range	-10°C to 50°C (14°F to 122°F)
Storage Temperature Range	-20°C to 60°C (-4°F to 140°F)
Protection Level	IP54
Drop Test Height	2 m (6.56 ft)
Interface	USB Type-C
Weight	Approx. 360 g (0.79 lb)
Dimension	221.7 mm × 73.5 mm × 80.6 mm (8.73" × 2.89" × 3.17")
Tripod Mounting	UNC 1/4"-20

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Web : [www.hdtnm.com](http://www.hdtnm.com)

#### HD ENGINEERING & SERVICES

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