

1 [Product Name](#)

Applicable Models: FS M3000SD

Product Name: Networked Thermal Imaging System

2 [General Description](#)

This system is a network dual vision thermal imaging camera system. As target pass the camera head, thermal and visual images are displayed on a monitor. Target temperature above a predefined value is displayed. This target can then be diverted and further assessed.

Network is a significant feature for these systems. Its remote, real-time and high accuracy features make monitoring/scanning easy and flexible. Its integrated dual camera feature with both visual and thermal images side by side allows for easier and faster monitoring as well as identification at the same time.

These systems are capable of evaluating target without restricting object flow. It is an ideal tool for target temperature monitoring .

[Intended Use](#)

The M3000 series of product models are telethermographic imaging systems that are intended for general thermal imaging. These products are not intended for medical purposes, nor for use by health care professionals or others for body temperature assessment. These products are not intended for human use for human body temperature scanning. These products are NOT intended for use in the diagnosis of disease or other conditions or in the cure, mitigation, treatment, or prevention of disease.

[Notes:](#)

The M3000 series of product models are available to purchase in the United States of America. Please contact us directly for any purchase inquiries.

3 [System Configuration](#)

Each system consists of a camera head, a set of Windows based operating software, a computer with FS software installed and a high accuracy black body (HCBB). A thermal camera is integrated in the camera head (see Fig.1). The camera head is mounted on the tripod or ceiling/wall mount using mounting brackets.

HCBB is a reference for high accuracy temperature measurement (see Fig. 2). The distance between HCBB and camera is typically around 3-5 meters (see Fig.3). The HCBB can be installed on a stand (maybe a tripod), a wall mount bracket, or hung off the ceiling by a standard ceiling mount kit. These three mounting options are as shown in Fig. 4.



S model



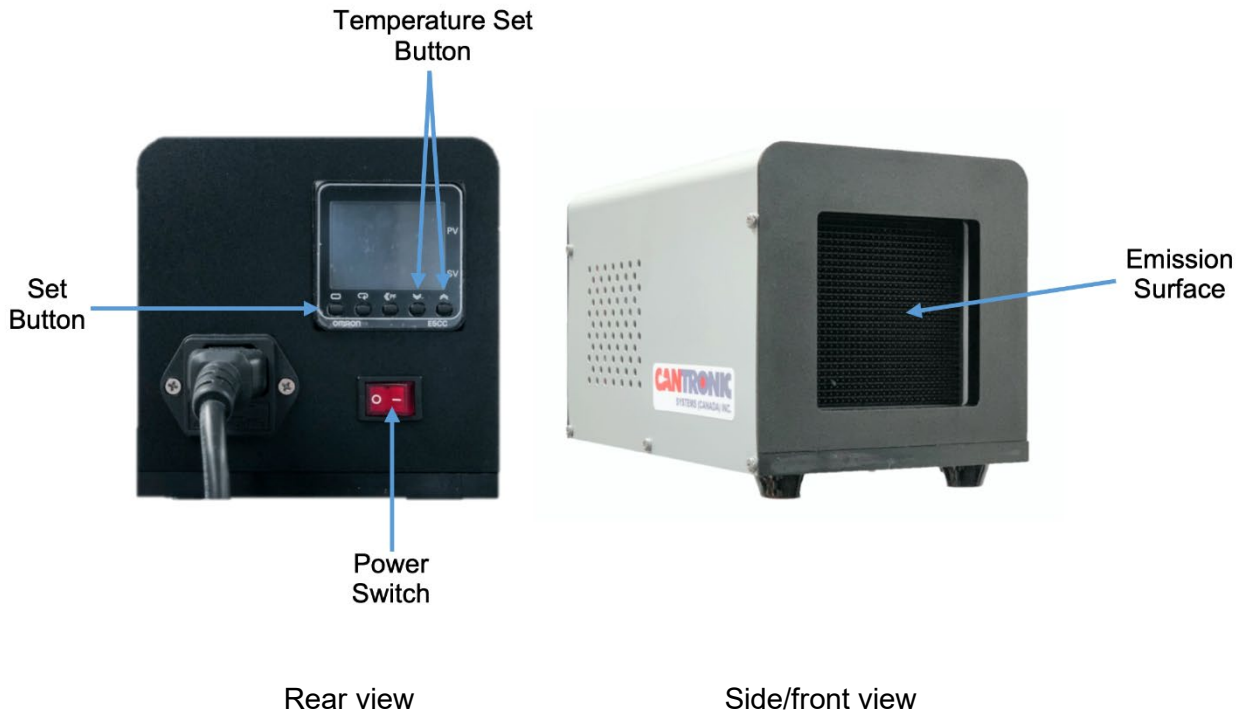
SD model



Rear view

Side view

Fig. 1. Camera Head



Rear view

Side/front view

Fig. 2. HCBB (standard version, other equivalent HCBB versions may be used). (Temperature on HCBB has been preset at factory. Do not adjust the setting unless very necessary.)

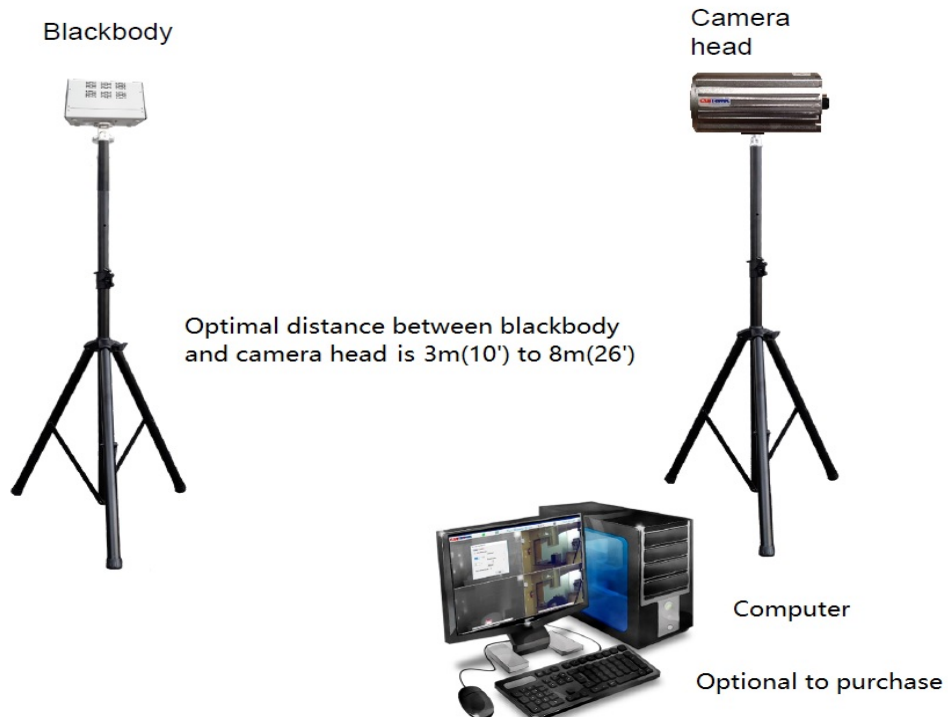


Fig. 3. General layout showing the distance between camera head and HCBB

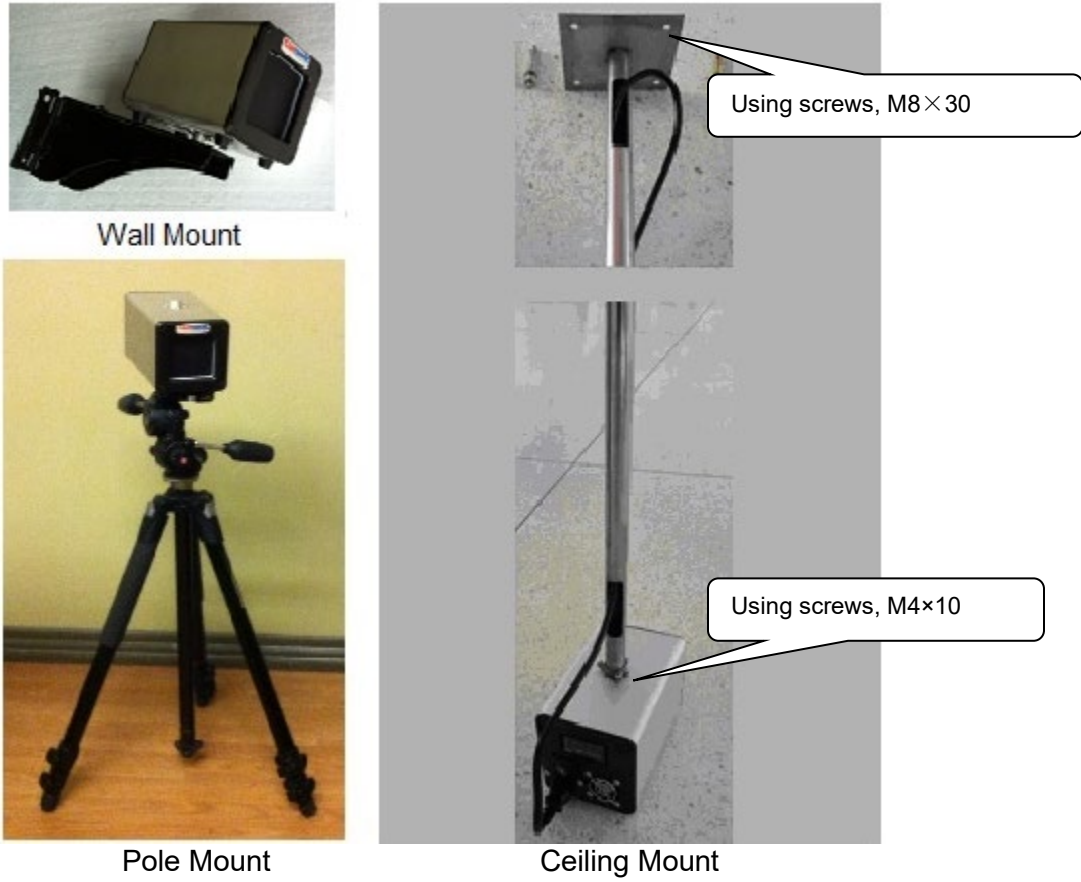


Fig. 4. HCBB mount options (3 options)

4 **Optical Features**

- 4.1 Thermal camera is equipped with a lens with a fixed field of view (FOV) of 24°x18° or wider.
- 4.2 The thermal camera can be focused manually.
- 4.3 Thermal camera can focus over the range from 1 meter to infinity.

5 Electrical and Operating Features

- 5.1 The power input of the camera is 12VDC.
- 5.2 The power input of the HCBB is 90—240VAC, with US 3-Pin plug to IEC (C13) female power cords.
- 5.3 System overall power consumption is 80W maximum.
- 5.4 Camera network port is 1000 Mbps 802.3 Ethernet LAN port.
- 5.5 The dimensions of the camera are 120 mm (Width) x 100 mm (Height) x 245 mm (Length).
- 5.6 The weight of the camera is approximately 2.5 Kg.
- 5.7 The dimensions of HCBB are 110 mm (Width) x 120 mm (Height) x 200 mm (Length).
- 5.8 The weight of standard HCBB is approximately 2.5 Kg.
- 5.9 The operating temperature range is from 0°C to +50°C. The maximum storage temperature range is from -40°C to +70°C.



S model



SD model



HCBB (standard version)

Camera head

6 System Technical Specifications**Thermal Camera**

Lens	FOV: $\geq 24^\circ \times 18^\circ$
Focal Plane Array	Micro-bolometer (Amorphous silicon or vanadium oxide)
Image Frequency	9 Hz (NTSC)*
Spectral Range	8 -- 14 μm
Number of Pixels	$\geq 320 \times 240$
Measurement Accuracy	$\leq 0.2^\circ\text{C}$ (typical)
Video output	Network digital

Visual Camera

Image Sensor	1/3" 2 Million Pixel CMOS Sensor
Video Frame Output Rate	PAL: 25 fps (1920x1080)/ NTSC:30 fps (1920x1080)

Software User Interface

Data Display	640 x 480 on screen/processing
Visual Alarm	User definable temperature scale and alarm trigger point
Alarm Function	Ignore Mode or Save Alarm Mode, sound or visual alarm or both (saves images to hard drive and creates log file for easy retrieval and review)

Network Function

Supported Protocols	TCP/IP, HTTP, DHCP, DNS, DDNS, RTP, RTSP, PPPoE, SMTP, NTP, UpnP, SNMP, FTP, 802.1x, QoS, HTTPS, IPv6, SIP/SRTP
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* Any image frequency above 9 Hz requires an export license.

Specifications subject to change without notice.

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