

1 [Product Name](#)

Applicable Model: **FeverScan M3000N/L**

Product Name: **Dual Vision Networkable Thermal Imaging System**

2 [General Description](#)

These systems are network dual vision thermal imaging camera systems. 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.

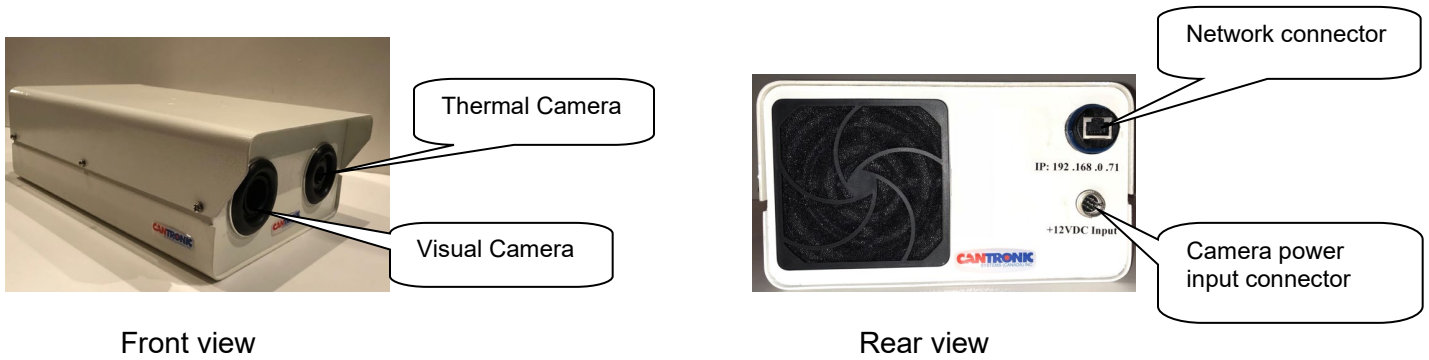
Network is a significant feature for these systems. Its remote, real-time and high accuracy features make monitoring/scanning easy and flexible. Its integrated dual camera feature with both visual and thermal images side by side allows for easier and faster monitoring as well as identification at the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

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

3 [System Configuration](#)

Each system consists of a camera head, an operator console (N type) or a processing computer (L type) and a high accuracy black body (HCBB). A thermal camera and a visual camera are integrated in the camera head (see Fig.1). For N type, the operator console includes a system power supply panel, a LCD monitor, a processing computer, a set of alarm speakers, power indicators and a power on-off lock. For L type, the processing computer is installed with Fever Scanner software. The camera head is mounted on the operator console for N type by a special mounting pole or on a tripod or ceiling/wall mounted for L type (see Fig. 2).

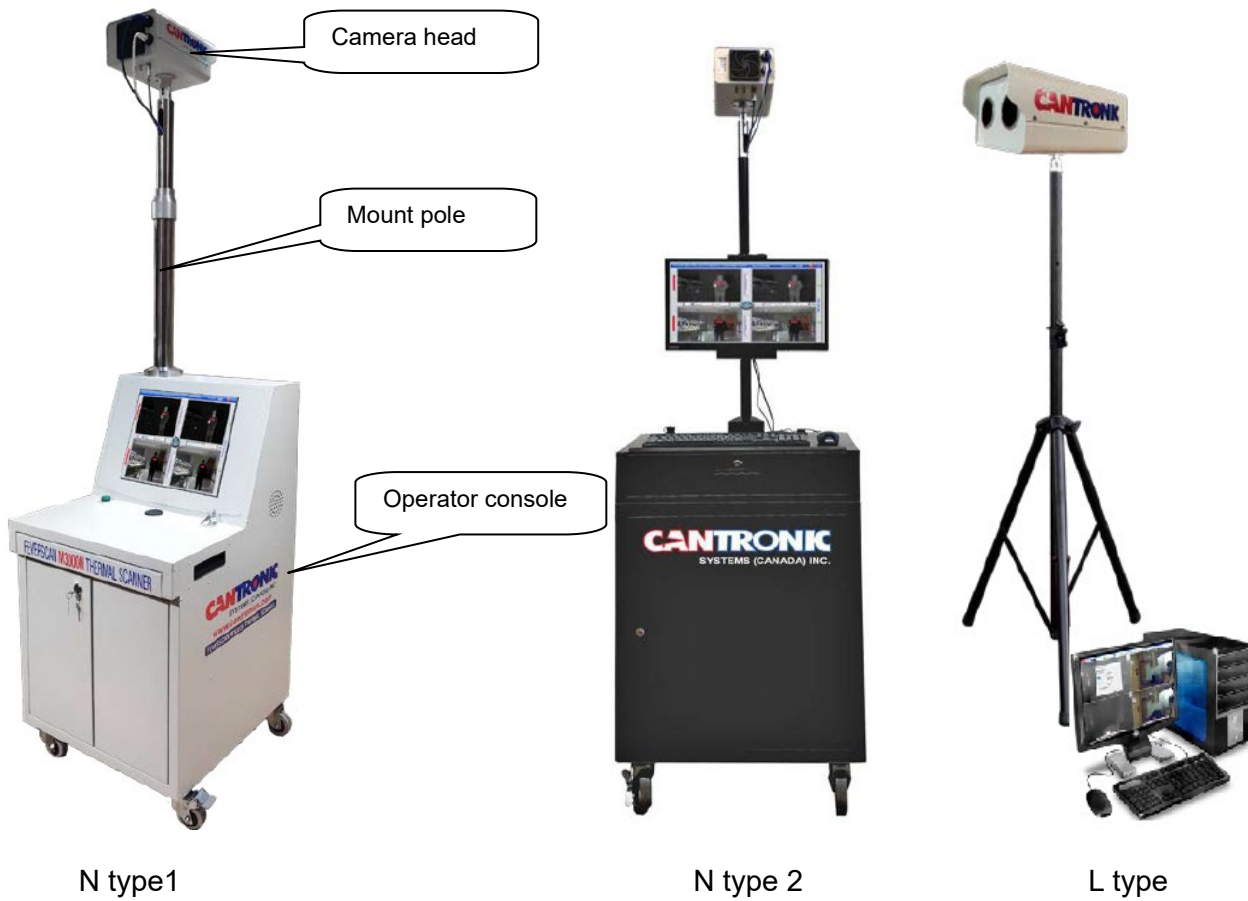
HCBB is a reference for high accuracy temperature measurement (see Fig. 3). The distance between HCBB and camera is typically around 3-5 meters (see Fig.4). The HCBB can be installed on a stand (maybe a tripod), a wall mount bracket, or hung off the ceiling by a standard ceiling mount kit. These three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



Front view

Rear view

Fig. 1. Camera Head



N type 1

N type 2

L type

Fig. 2. Operator console / Tripod with processing computer station (camera head mounted)

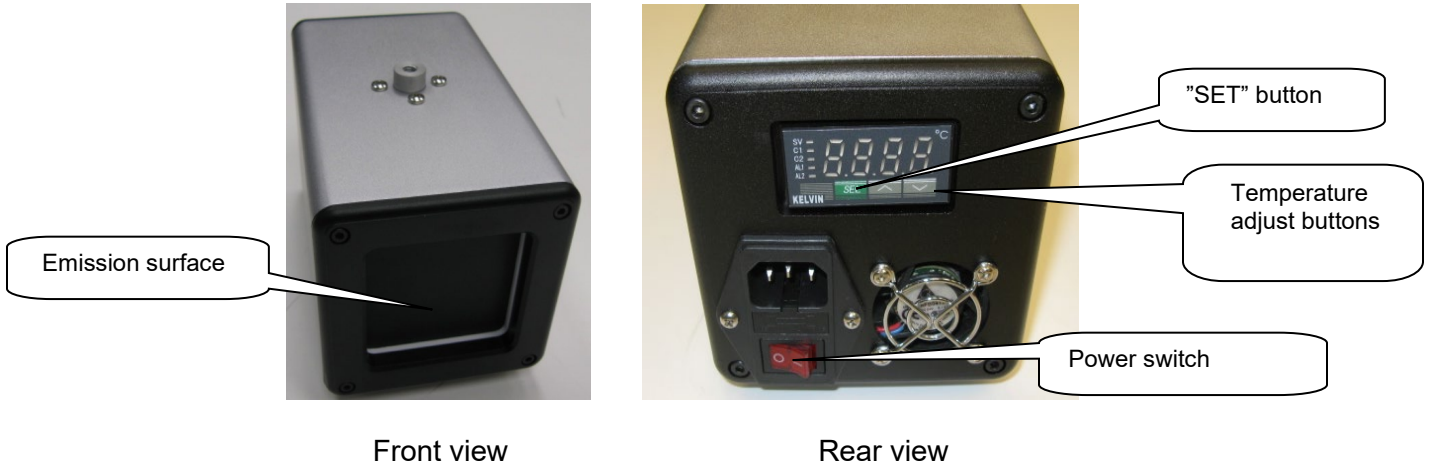


Fig. 3. HCBB (standard version, other equivalent HCBB versions may be used)

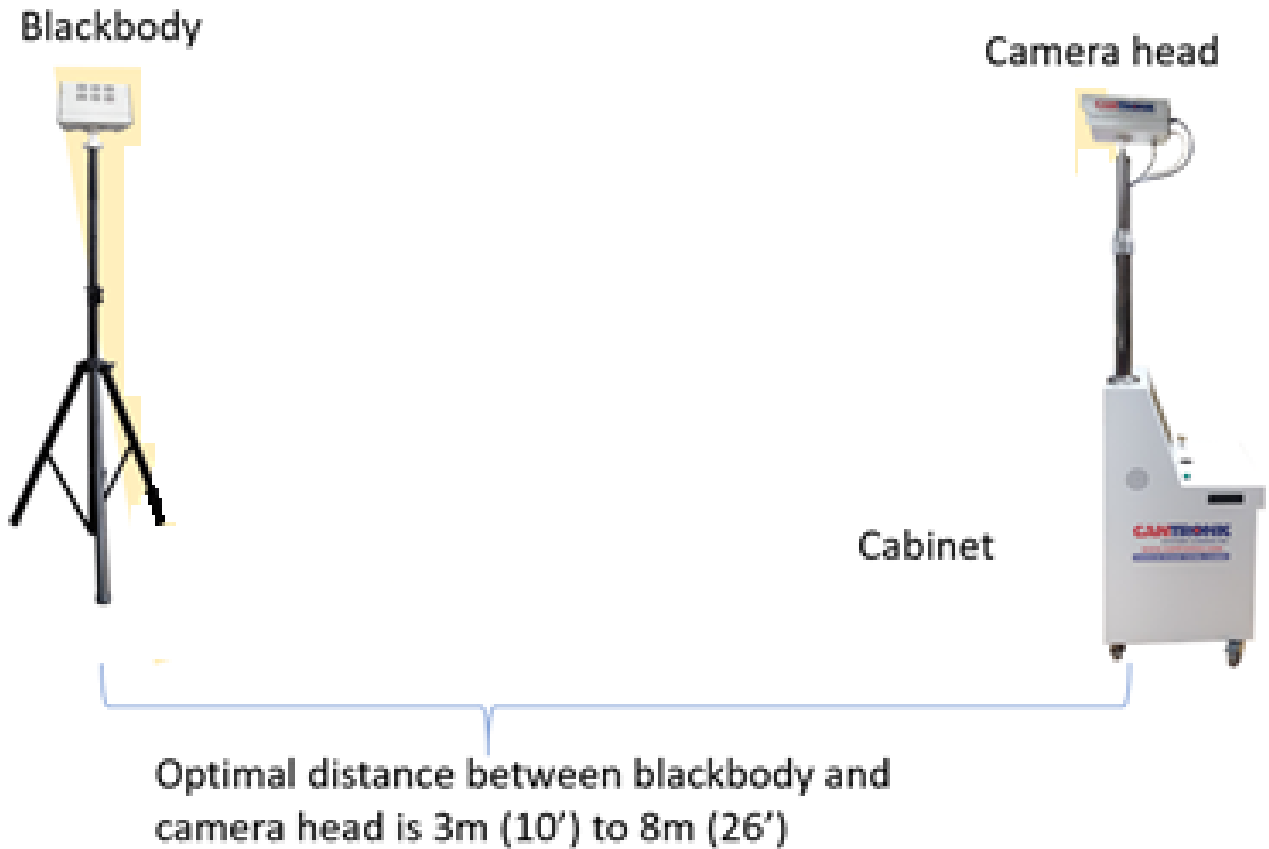


Fig. 4. General layout showing the distance between camera head and HCBB

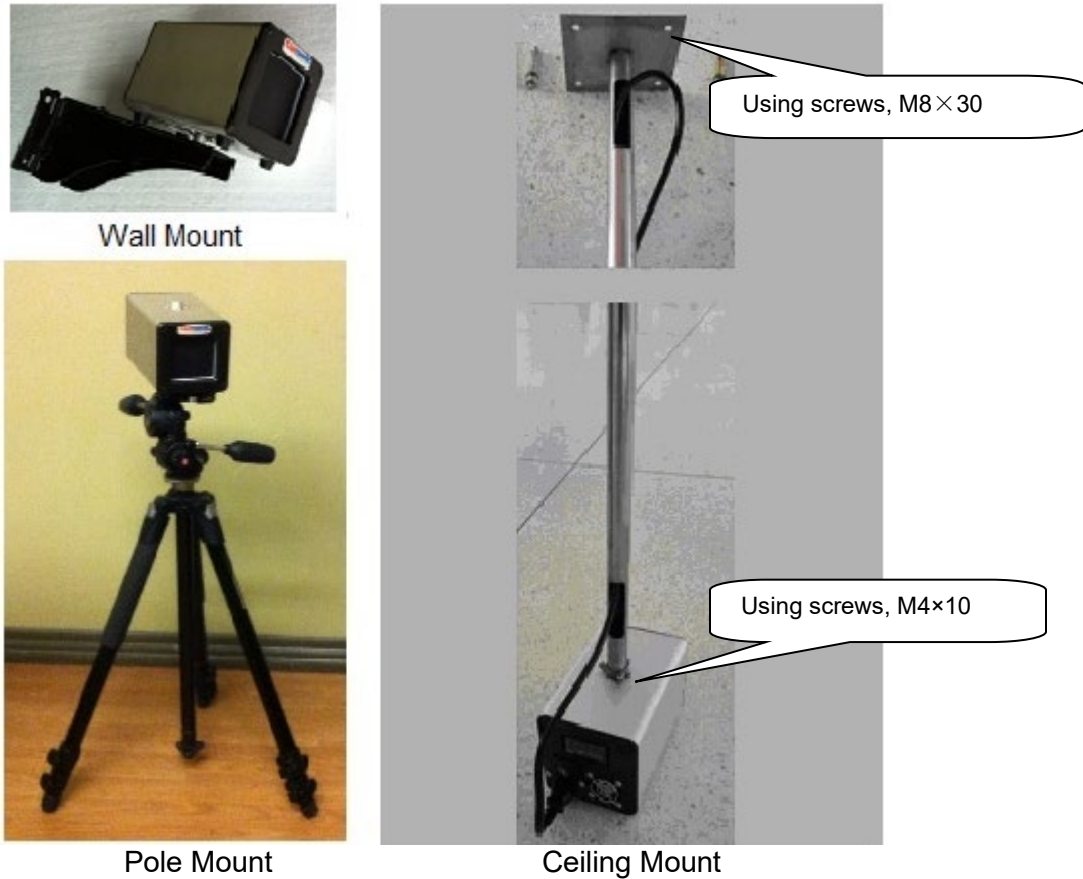


Fig. 5. HCBB mount options (3 options)

4 **Optical Features**

- 4.1 Thermal camera is equipped with a lens with a fixed field of view (FOV) 24°x18°.
- 4.2 Visual camera is CCD camera equipped with a manual adjustable FOV lens.
- 4.3 Both thermal and visual cameras can be focused manually.
- 4.4 Thermal camera can focus over the range from 1 meter to infinity.

5 Electrical and Operating Features

- 5.1 The power input of the system is 90—240VAC.
- 5.2 Both console and HCBB come with US 3-Pin plug to IEC (C13) female power cords.
- 5.3 System overall power consumption is 150W maximum.
- 5.4 Camera head network port is 1000 Mbps 802.3 Ethernet LAN port.
- 5.5 The overall dimensions of operator console are 635 mm (Width) x 1143mm (Height) x 580 mm (Length).
- 5.6 The weight of the operator console is approximately 55 Kg.
- 5.7 The dimensions of the camera head are 280 mm (Width) x 180 mm (Height) x 420 mm (Length).
- 5.8 The weight of the camera head is approximately 4 Kg.
- 5.9 The dimensions of HCBB are 110 mm (Width) x 120 mm (Height) x 180 mm (Length).
- 5.10 The weight of standard HCBB is approximately 1.8 Kg.
- 5.11 The operating temperature range is from 0°C to +50°C. The maximum storage temperature range is from -40°C to +70°C.



Operator console (N type only)



Camera head



HCBB (standard version)

6 System Technical Specifications

Thermal Camera

Lens

Focal Plane Array

FOV: $\geq 24^\circ \times 18^\circ$

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 (1960x1080)/ NTSC:30 fps (1960x1080)

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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