
Laser & Optical & Thermal All-in-one Camera From
<http://www.jammerbooster.com/>

MODEL:	TH-HD15KM-TL-GRJ
SIZE:	750*440*220mm
PACKAGE:	Neutral Packing

HD Long Range Optical & Thermal Imaging & Laser Lighting All-in-one Camera

Model: TH-HD15KM-TL-GRJ

Introductions:

The HD Long Range Optical & Thermal Imaging & Laser Lighting All-in-one Camera system relies on aerospace flight distance missile servo stabilization technology, servo control technology, image processing technology, communications control technology, optical systems integration technology and other core technology, high precision and high reliability digital proprietary gyro stabilized platform, can effectively isolate the carrier disturbance, clear images and stable; using automatic tracking DSP + FPGA-based digital image technology to meet the stable target tracking of complex environment;

Product design and production process strictly according to demonstration program evaluation, detailed design review, design verification, design validation by aerospace product design and management control procedures, and strictly controlled product quality.

Features:

- 1. Visible light, thermal sensing dual-channel imaging technology, integrated structure, 24 hours monitoring;**
- 2. Thermal imaging using international advanced uncooled polysilicon, micro heat detectors 384*288 or 640*480 line;**
- 3. Thermal imaging fixed focal length lens, visual field switch, continuous zoom selectable, motorized focus to obtain a clearer picture of night vision; according to the focal length of the lens can detect the target with distance 1 to 15km;**
- 4. Thermal imaging integrated temperature detection module, real-time analysis of target area temperature changes, automatic warning of fire detected;**
- 5. High-definition video camera through the fog, mechanical filter switch, 240 gray levels, automatic black level, contour correction;**
- 6. Magnification zoom lens to telephoto needs, with auto-focus, preset function?**
- 7. Inclement weather adaptability, with far-infrared function, even if all black, rain, snow, fog, smoke and dust environment can be effectively imaged;**
- 8. Preset reach 80, 255 or more, support apple peeling scanning;**
- 9. Resistance to harsh environments with advanced reinforcement, proof from dust, rain, salt spray, vibration and shock, IP66 level;**
- 10. GIS systems can be combined to have targeting positioning capabilities, positioning accuracy 0.01 degree (optional);**
- 11. 3D positioning, real-time image transmission to the monitoring center (optional);**
- 12. Automatic Target Tracking;**
- 13. HD lens auto-focus function;**
- 14. Maximum temperature display, mouse temperature tracking, multi-ring temperature contrast temperature alarm, multi-mode temperature alarm;**
- 15. Laser light can see up to 5km target with HD image at night.**

Applications:

Warship Air defense, border and coastal defense, forest fire prevention, reservoirs, landslides, substations, power plants, petrochemical field, fireworks identification alarm, traffic intelligence analysis, runways, airports, smart city, police vehicle monitoring, etc.

Technical Specifications:

Mechanical Characteristics

Application environment

Outdoor

Installation

Flat base mounting

Power supply

AC/ DC24V $\pm 10\%$ $I_{in} \leq 10A$

Power Consumption

$\leq 100W$ including heating: $\leq 250W$

Temperature & Humidity

$-35^{\circ}C \sim +60^{\circ}C$ & 35%~90%

Protection level

IP66, anti-rust, anti-corrosion coating

Weight

35Kg

Size

750*440*220mm(L *W *H)

Visible Light Imaging

Imaging

1/1.7", 1/1.8", 1/1.9", 1/2" Interline CCD / HD CMOS/CCD

Resolution

1920*1080P, 2048*1536, 4096*2160, 4000*3000

Pixels

HD 200/300/500/1000 megapixels

Min Illumination

0.0009Lux (night) / 0.0002Lux (day)

Color black and white conversion

Day / night automatic conversion, ICR mechanical double filter switch external control

Lens focal length

10~320mm, 15.6~500mm, 12.5~750X2=1500mm, 16.7~1000X2=2000mm

O/I enlarge

2X

Lens Control

Power zoom, aperture value F3.9-T1500

Optical magnification

32X/ 60X / 120X

Others

Penetrating fog Imaging, day and night IR correction 400-1100nm, lens available

Infrared Thermal imaging

Detector Type

Focal plane array(FPA), Uncooled VOx, refrigeration micro bolometer

Pixels

384x288/ 640X480

Spectral range

8-14 μm

Lens focal length

75mm, 100mm, 150mm, 250mm, 320mm, 450mm, customized

Focus

Motorized focus, or auto focus

Temperature Mode	The maximum temperature display, mouse temperature tracking, mu temperature contrast temperature alarm, multi-mode temperature al
3D Positioning	Available (optional)
Auto Focus Lens	All the target near or far can be auto focused
Swatches control	Black hot, incandescent and other 11 kinds of swatches switch
Image Processing	Detail Enhancement (DDE), automatic gain control (AGC)
Fire Recognition	Integrated temperature measurement processor, real-time analysis target area temperature, and fire automatic warning
All-round heavy-duty turntable & Shield	
Horizontal rotation speed	Constant speed 3 ° / s or variants 0-30 ° / s
Vertical rotation speed	Constant speed 1.5 ° / s or shift 0-25 ° / s
Horizontal rotation range	360 ° continuous rotation
Vertical rotation range	± 45 ° (adjustable)
Communication Control	RS-485/422?Pelco P/D -2400/4800/9600
Preset	80, 255
Cruise function	Support 8 cruises, 10 points per cruise, support apple peeling scanr
Positioning accuracy	±0.01°
Window size	Multi-window Ø100, Ø65, Ø40, germanium window
Shield Function	Heating, air-cooling, sun shading, wipers
Secondary development	RS422 PTZ return function, can work with the GIS system to position and longitude(optional)
Laser Lighting	
Distance	1 to5km
Automatic zoom	Automatic zoom, 240 or stepless optical zoom lens, standard interf synchronize with automatic tracking
Working life	High reliability, working life more than 20,000 hours



