HTD4136-50
Thermal & Optical Bi-spectrum Network Speed Dome

Perfect View HTD4136-50 Thermal & Optical Bi-spectrum Network Speed Dome is applied to perimeter defense and fire-prevention purposes in critical infrastructures such as: airport, railway, prison, power station, 4S stores, and so on. The pre-alarm system helps you discover unexpected events immediately and protects you from property loss.

Smart Function (Thermal Imaging)

- Leading image processing technology: Adaptive AGC, DDE, 3D DNR, NETD < 40mk (@25° C, F#=1.0)Up to 2592 × 1944 resolution

- Smart tracking: Panorama tracking, Event tracking and Multi-scene patrol tracking

- Smart tracking linkage: thermal view and optical view

- Powerful behavior analysis algorithm: Line crossing, Intrusion, Region Entrance & Exit

- Reliable temperature exception alarm function

- Advanced fire detection algorithm

Thermal Imaging Module Function

- 384x288 resolution, high sensitivity sensor, support contrast adjustment

- Support shutter adjustment in various modes

- 3D DNR, 15 palettes of color adjustable, image detail enhancements

Specification

Thermal Module	
Image Sensor	Vanadium Oxide Uncooled Focal Plane Arrays
Max. Resolution	384 x 288
Detector Pitch	17μm
Response Waveband	8μm to 14μm
NETD	< 40mk (@25° C,F#=1.0)
Lens (focal length	50mm
MRAD	0.34
Field of View	7.47°x5.61°
Min. Focusing Distance	7.5 m
F Number	1.0

Optical Camera	
Image Sensor	1/1.9'' Progressive Scan CMOS
Min. Illumination	Color: 0.002 lux @ (F1.5 , AGC On) B/W : 0.0002 lux @ (F1.5 , AGC On)
Shutter Time	1-1/30,000s
White Balance	Auto/Manual /ATW/Indoor/Outdoor/Daylight lamp/Sodium lamp
Focal Length	5.7-205.2mm, 36x
Day & Night	IR cut filter
Digital Zoom	16×
Privacy Mask	24 privacy masks programmable; optional multiple colors and mosaics
Focus Mode	Auto/Semi-automatic/Manual
Field of View	58.7° - 2.0° (Wide-Tele)
Optical Defog	Yes
Enhancement	3D DNR
WDR	120db
Aperture Range	F1.5-F4.5
Min. Working Distance	10-1500mm (Wide-Tele)

Smart Function	
VCA	Support 4 VCA rule types (Line Crossing, Intrusion, Region Entrance, and Region Exiting), 10 scenes and 8 VCA rules for each scene.
Temperature Measurement	Support 3 temperature measurement rule types, over 256 presets as scene, 21 rules of each scene (10 points, 10 regions, and 1 line)
Temperature Range	-20 ° C to 150 ° C (-4 ° C to 302 ° F)
Temperature Accuracy	± 8 ℃ (14.4 ° F)
Fire Detection	Support 10 fire points

PTZ	
Movement Range (Pan)	Pan: 360° Continuous Rotate; Tilt: From -15° to + 90° (auto flip)
Pan Speed	Configurable, From 0.1° /s to 160° /s, Preset Speed: 240° /s
Tilt Speed	Configurable, From 0.1° /s to 120° /s, Preset Speed: 200° /s
Proportional Zoom	Yes
Presets	300
Patrol Scan	8 patrols, up to 32 presets for each patrol
Pattern Scan	4; More Than 10 Minutes Per Pattern
Power-off Memory:	Yes
Park Action	Preset/Pattern Scan/Patrol Scan/Auto Scan/Tilt Scan/Random Scan/Frame Scan/Panorama Scan
PTZ Status	Turn On/Turn Off

Scheduled Task	Preset/Pattern Scan/Patrol Scan/Auto Scan/Tilt Scan/Random Scan/Frame Scan/Panorama Scan/Dome Reboot/Dome Adjust/Aux Output
Smart Features	
Basic Event Detection	Motion Detection, Video Tampering, Alarm Input, Alarm Output, Exception
Smart Event Detection	Audio Exception Detection, Face Detection, Intrusion Detection, Line Crossing Detection, Region Entrance Detection, Region Exiting Detection
Auto-tracking	Support
Smart Record	ANR (Automatic Network Replenishment), Dual-VCA
Infrared	
IR Distance	Up to 200m
IR Intensity and Angle	Auto Adjust
Network	
Main Stream	Optical: 50Hz:25fps(1920× 1080), 25fps(1280× 960), 25fps(1280× 720) Optical: 60Hz:30fps(1920× 1080), 30fps(1280× 960), 30fps(1280× 720) Thermal: 50fps(384 × 288)
Sub-Stream	50Hz:25fps (704 × 576), 25fps (352 × 288), 25fps (176 × 144) 60Hz:30fps (704 × 480), 30fps (352 × 240), 30fps (176 × 120) Thermal: 50fps (384 × 288)
Video Compression	H.264 (Baseline/Main/High Profile) /MJPEG/MPEG4
Audio Compression	G.711u/G.711a/G.722.1/MP2L2/G.726/PCM
Protocols	IPv4/IPv6,HTTP,HTTPS,802.1x,Qos,FTP,SMTP,UPnP,SNMP,DNS,DDNS,NTP,RTSP,RTCP,RTP,TCP,UDP,I GMP,ICMP,DHCP, PPPoE, Bonjour
Simultaneous Live View	Up to 20 channels
User/Host	Up to 32 users, 3 levels: Administrator, Operator and User
Security Measures	User authentication (ID and PW), MAC address binding, HTTPS encryption, IEEE 802.1x access control, IP address filtering
System Integration	
Alarm Input	Up to 7-ch Input (0-5V DC)
Alarm Output	Up to 2-ch Relay Output; Support Alarm Linkage
Alarm Linkage	Preset/Patrol Scan/Pattern Scan/SD Card Record/Relay Output/Smart capture/FTP upload/Email linkage
Audio Input	LINE_IN Input/MIC Input; Peak: From 2 to 2.4V[p-p]; Output Impedance: 1KΩ±10%
Audio Output	Linear Level; Impedance: 600Ω
Network Interface	Built-in RJ45; 10M/100M Ethernet Interface
Storage	Built-in Micro SD/SDHC/SDXC Card Slot, Up to 64GB; Support Manual/Alarm Recording
Analog Video Output	1.0V [p-p]/75Ω, PAL/NTSC/BNC
RS-485	Half-Duplex; PELCO-P and PELCO-D Self-adaptive
API	Open-ended, support ONVIF, ISAPI, and CGI, support Third-Party Management Platform
Client	CMS, Guarding Vision
Web Browser	IE 7+, Chrome 18+, Firefox 5.0+, Safari 5.02+; Multiple Languages
General	
Power	24V AC, 60W
Working Temperature	From -40° C to 60° C (-40° F to 140°F); Humidity: 90% or Less
Menu	English
Protection Level	IP66 Standard; TVS 6000V Lightning Protection, Surge Protection and Voltage Transient Protection
Wiper	Yes
Weight	Approx. 8kg (17.64 lb)

Wide Range Coverage for Different Specifications

Note: The table below is only for reference, the performance varies from model to model, and the specific data is based on 17 μm detector-pitch.

Lens (focal length)	7mm	10mm	15mm	25mm	35mm	50mm	75mm
Detection range (Vehicles)	631m	902m	1353m	2255m	3157m	4510m	6765m
Detection range (Humans)	206m	294m	441m	735m	1029m	1471m	2206m
Recognition range (Vehicles)	158m	225m	338m	564m	789m	1127m	1691m
Recognition range (Humans)	51m	74m	110m	184m	257m	368m	551m
Identification range (Vehicles)	79m	113m	169m	282m	395m	564m	846m
Identification range (Humans)	26m	37m	55m	92m	129m	184m	276m

Smart functions Range Table

Note: The table below is only for reference, the performance varies from model to model, and the specific data is based on 17 μm detector-pitch.

Lens (focal length)	7mm	10mm	15mm	25mm	35mm	50mm	75mm
VCA range (humans)	50m	72m	110m	183m	255m	360m	540m
VCA range (Vehicles)	144m	205m	308m	514m	720m	1029m	1544m
Temperature measurement (Object:2×2 m)	164m	234m	351m	585m	819m	1170m	1775m
Temperature measurement ((Object:1×1 m)	83m	118m	177m	295m	413m	590m	885m
Fire Detection (Object:2×2 m)	412m	588m	882m	1470m	2058m	2940m	4410m
Fire Detection (Object:1×1 m)	206m	294m	441m	735m	1029m	1470m	2205m

Order Model

HTD4136-50

Dimensions

198.6 mm
(7.82″)

410 mm
(16.15″)

220 mm (8.66″)

Φ266.6 mm (10.50″)

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