

## HM-TD2H37T-10/X Thermographic Heat Resistant Bullet Camera



HIKMICRO HM-TD2H37T-10/X Thermographic Heat Resistant Bullet Camera is able to measure object's temperature at a high temperature of environment in real time. With the advantage of standing high temperature, low power consumption, it can independently be used, for failure detection, and industrial process control. The industries can be applied to include electric system, industrial automation and so on.

- 384 × 288 resolution, high sensitivity sensor
- Object temperature range: - 20 °C to 150 °C (- 4 °F to 302 °F), 0 °C to 550 °C (32 °F to 1022 °F); Max (± 2 °C, ± 2%)
- Temperature measurement at user-defined points, lines, and areas
- Color alarm (isotherm) available for Above, Between, and Below object temperatures
- Air Cooling and Liquid Cooling Housing for High Ambient Temperature Environment
- Working Temperature/Humidity with Air Cooling and Liquid Cooling: 0 °C to 200 °C (32 °F to 392 °F); 95% or less
- Working Temperature/Humidity without Air Cooling and Liquid Cooling: -20 °C to 65 °C (-4 °F to 149 °F); 95% or less
- Real-time Temperature Data Reporting

## ▪ Specification

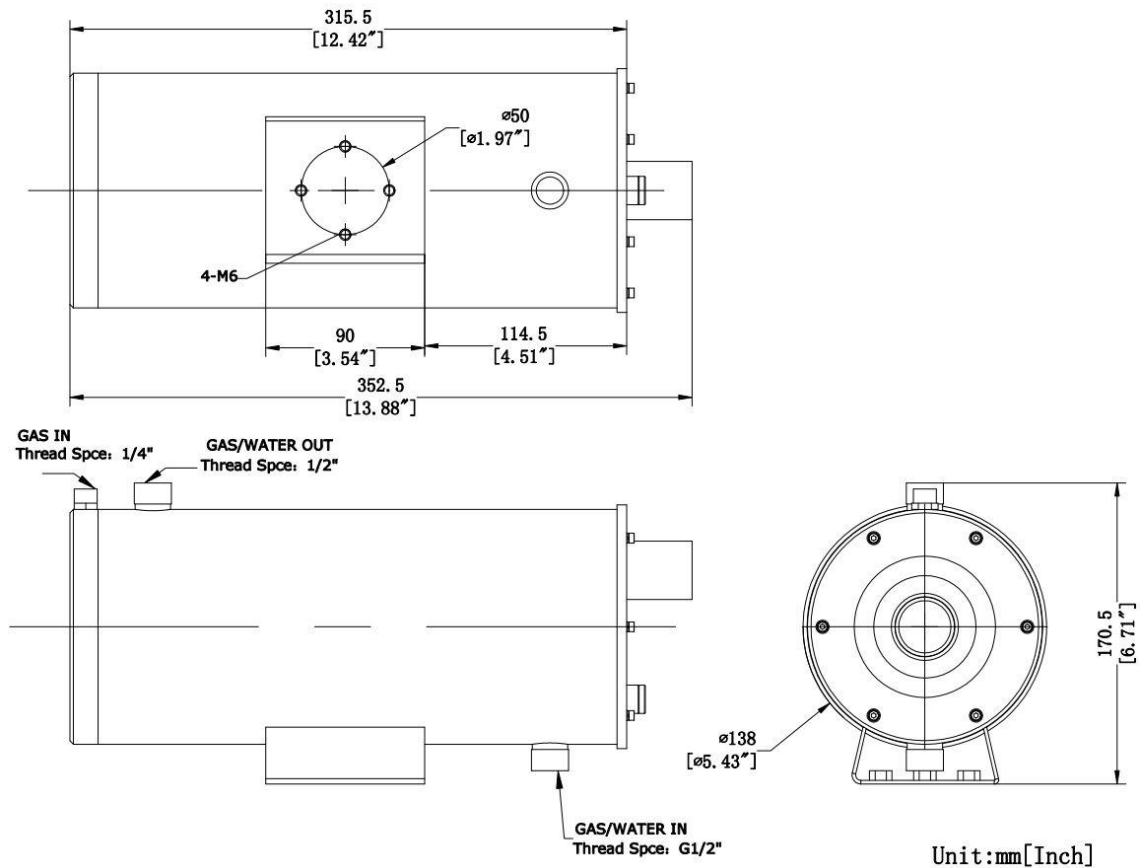
Thermal Module	
Image Sensor	Vanadium Oxide Uncooled Focal Plane Arrays
Resolution	384 x 288
Pixel Pitch	17 $\mu\text{m}$
Spectral Range	8 $\mu\text{m}$ to 14 $\mu\text{m}$
NETD	$\leq 35 \text{ mK}$ (@25° C, F# = 1.0)
Focal Length	9.7 mm
Focus Mode	Athermalized
IFOV	1.75 mrad
Aperture	F1.0
Field of View	37.5° × 28.5° (H × V)
Min. Focusing Distance	1.5 m
Digital Zoom	2×, 4×
Measurement and Analysis	
Object Temperature Range	-20 °C to 150 °C (-4 °F to 302 °F), 0°C to 550 °C (32 °F to 1022 °F)
Temperature Accuracy	Max ( $\pm 2 \text{ }^\circ\text{C}$ , $\pm 2\%$ )
Measurement Presets	Hot spot, cold spot in real time
Point	10 User Presets
Line	1 User Presets
Area	7 User Presets
Color Alarm (Isotherm)	Above/Between/Below
Thermographic Integration	
Temperature Metadata	Continuous output data of preset thermographic rules and measured temperature
Thermographic Data Encoding	4 fps, 32-bit 384 × 288 per frame
Thermographic Data Upload	Real-time full-screen thermographic data matrix (16-bit or 32-bit 384 × 288) via RTSP, ISAPI, and SDK
Raw Data Upload	Real-time full-screen YUV data via RTSP and SDK
Video and Image	
Main Stream	50 fps (384 × 288)
Video Compression	H.264/MJPEG
Color Palettes	15 options: White Hot, Black Hot, Fusion 1, Rainbow, Fusion 2, Ironbow 1, Ironbow 2, Speia, Color 1, Color 2, Ice Fire, Rain, Red Hot, Green Hot, Dark Blue
Network	
Protocols	IPv4/IPv6, HTTP, HTTPS, 802.1x, QoS, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP, RTSP, RTCP, RTP, TCP, UDP, IGMP, ICMP, DHCP, PPPoE
Simultaneous Live View	Up to 3 channels
User/Host level	Up to 32 users, 3 levels: Administrator, Operator, User
Security	User authentication (ID and PW), MAC address binding, HTTPS encryption, IEEE 802.1x(EAP-MD5, EAP-TLS), access control, IP address filtering
Client	HIKMICRO Studio
Interface	
Alarm Input	1, alarm input (0-3.3 VDC)
Alarm Output	1, alarm output; NC, level quantity

Communication Interface	1, RJ45 10 M/100 M self-adaptive Ethernet interface 1, RS-485 interface (ModBus available)
Analog Output	1, CVBS output
<b>General</b>	
Menu Language	English
Power Supply	10-30 VDC, Max. 2.3 W
Working Temperature/Humidity	0 °C to 200 °C (32 °F to 392 °F); 95% or less with air cooling and liquid cooling ; -20 °C to 65 °C (-4 °F to 149 °F); 95% or less without air cooling or liquid cooling
Protection Level	IP67
Dimensions	352.5 mm × 170.5 mm × 138 mm (13.88" x 6.71" x 5.43")
Weight	Approx. 6520 g (14.37 lb)
<b>High-temperature Resistance</b>	
Cooling Liquid	(application example with incoming water at 20 °C (68 °F) temperature): Ambient Temperature 80 °C (176 °F), Flow Rate above 0.65 L/min ; Ambient Temperature 100 °C (212 °F), Flow Rate above 1.22 L/min ; Ambient Temperature 150 °C (302 °F), Flow Rate above 1.76 L/min ; Ambient Temperature 200 °C (392 °F), Flow Rate above 3.3 L/min ;
Cooling Air	(application example with incoming air at 20 °C (68 °F) temperature and with pressure 7 bar): Ambient Temperature 70 °C (158 °F), Flow Rate above 15.34 m <sup>3</sup> /h ; Ambient Temperature 85 °C (185 °F), Flow Rate above 32.54 m <sup>3</sup> /h ; Ambient Temperature 100 °C (212 °F), Flow Rate above 37.82 m <sup>3</sup> /h ; Ambient Temperature 120 °C (248 °F), Flow Rate above 53.97 m <sup>3</sup> /h ;

#### ▪ Available Model

HM-TD2H37T-10/X

## Dimension



## Accessory

## Optional



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