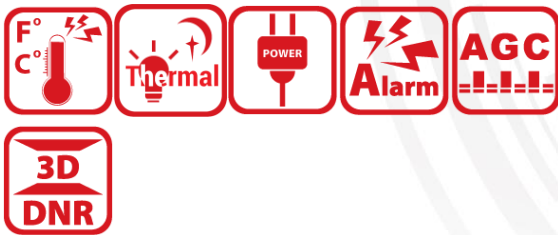




HIKMICRO

HF610

Heat Resistant Bullet Camera



HIKMICRO HF610 Heat Resistant Bullet Cameras 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 devices for molten steel/molten iron detection, cement rotary kiln, glass processing, automobile lab, temperature measurement of conveyor belt for transferring billet, rail rolling temperature measurement, etc.

▪ Features

- High sensitivity sensor with 640 x 512 resolution.
- Object temperature range: -20°C to 150°C, 0 °C to 650 °C; Max (± 2 °C, $\pm 2\%$).
- Temperature measurement at 3 user-defined rule types (max. 21 points, max. 21 areas, and max. 1 line).
- A highlighted cross at the max. temperature in the thermal image.
- Thermal image frame rate: 50 fps.
- Supports 18 pseudo color modes.
- 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 ; 95% or less

▪ Specification

Thermal Module

Image Sensor	Vanadium Oxide Uncooled Focal Plane Arrays
Resolution	640 x 512
Pixel Pitch	12 μm
Spectral Range	8 μm to 14 μm
NETD	$\leq 30 \text{ mk} (@25^\circ\text{C}, F\#=1.0)$
Focal Length	5mm 10mm 18mm
IFOV	5mm : 2.40mrad 10mm: 1.20mrad 18mm: 0.67mrad
Field of View	5mm : $90.0^\circ(\text{H}) \times 70.1^\circ(\text{V})$ 10mm: $45.2^\circ(\text{H}) \times 36.1^\circ(\text{V})$ 18mm: $24.2^\circ(\text{H}) \times 19.4^\circ(\text{V})$
Min. Focusing Distance	5mm : 0.35 m 10mm: 1.30 m 18mm: 4.00 m
Aperture	5mm : F1.0 10mm: F1.0 18mm: F1.1

Measurement and Analysis

Object Temperature Range	-20°C to 150°C , 0°C to 650°C
Temperature Accuracy	Max ($\pm 2^\circ\text{C}$, $\pm 2\%$)
Measurement Presets	3 temperature measurement rule types, 21 rules (max. 21 points, max. 21 regions, and max. 1 line). *The total No. of rules enabled at the same time can't exceed 21.

Video and Image

Main Stream	50 fps (640 $\times$ 512)
Video Compression	H.265/H.264/MJPEG
Color Palettes	18 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, Winter, Summer, Blue Red
Digital Zoom	$\times 2$, $\times 4$, $\times 8$
Radiometric Capture	Yes
Radiometric Infrared-Video Streaming (Compressed)	Over RJ45, 640 $\times$ 512@50 fps

Network

Protocols	IPv4,HTTP,HTTPS,802.1x,Qos,FTP,SMTP,UPnP,SNMP,DNS,DDNS,NTP,RTSP,RTCP,RTP,TCP,UDP,IGMP,ICMP,DHCP,ISUP,GB28181,ONVIF,modbusTCP,WebSocket,PPPoE,SRTP,OTAP
API	MODBUS, ISAPI, Network SDK, Open Network Video Interface (Profile S, Profile G)
Simultaneous Live View	Up to 20 channels
Security	User authentication (ID and Password), MAC address binding, HTTPS encryption, IEEE 802.1x access control, IP address filtering
Client	HIKMICRO Studio

Interface

Alarm Input	1, alarm input (0-3.3 V DC)
Alarm Output	1, alarm output; NO, Built-in relay (max. DC 60V 1.3A)
Analog Output	1, CVBS output
Communication Interface	1, RJ45 10 M/100 M/1000 M self-adaptive Ethernet interface 1, RS-485 interface (HIKVISION, PELCO-P, PELCO-D, modbusRTU, modbusASCII)

General

Menu Language	33 languages English, Russian, Estonian, Bulgarian, Hungarian, Greek, German, Italian, Czech, Slovak, French, Polish, Dutch, Portuguese, Spanish, Romanian, Danish, Swedish, Norwegian, Finnish, Croatian, Slovenian, Serbian, Turkish, Korean, Traditional Chinese, Thai, Vietnamese, Japanese, Latvian, Lithuanian, Portuguese (Brazil), Ukrainian
Power Supply	12 V DC, Max. 3.5 W
Material	SUS304
Working Temperature/Humidity	0 °C to 200 °C; 95% or less with air cooling and liquid cooling ; -20 °C to 60 °C; 95% or less without air cooling or liquid cooling
Protection Level	IP67
Weight	Approx. 6520 g
Dimensions	352.5 mm × 170.5 mm × 138 mm

High-temperature Resistance

Cooling Liquid	(application example with incoming water at 20 °C temperature): Ambient Temperature 80 °C , Flow Rate above 0.65 L/min ; Ambient Temperature 100 °C , Flow Rate above 1.22 L/min ; Ambient Temperature 150 °C , Flow Rate above 1.76 L/min ; Ambient Temperature 200 °C , Flow Rate above 3.3 L/min ;
Cooling Air	(application example with incoming air at 20 °C temperature and with pressure 7 bar): Ambient Temperature 70 °C , Flow Rate above 15.34 m³/h ; Ambient Temperature 85 °C , Flow Rate above 32.54 m³/h ; Ambient Temperature 100 °C , Flow Rate above 37.82 m³/h ; Ambient Temperature 120 °C , Flow Rate above 53.97 m³/h ;

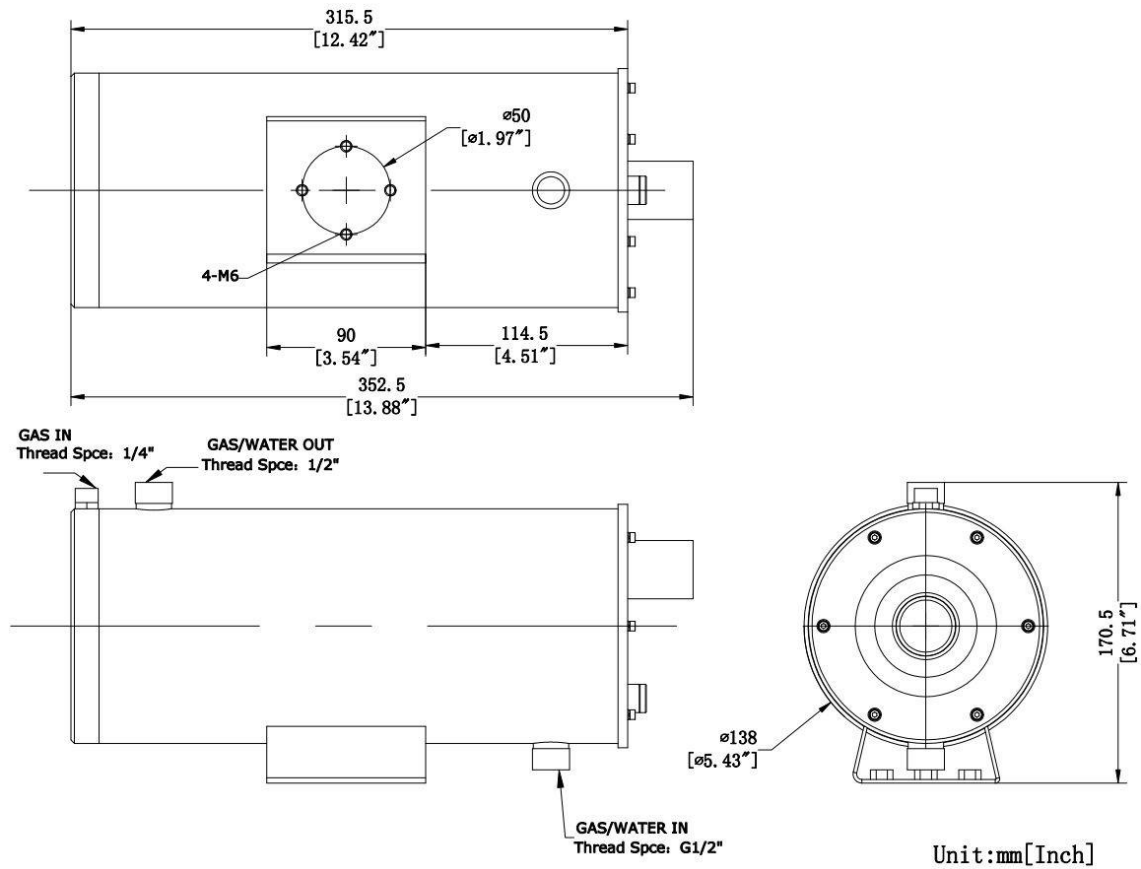
▪ Available Model

HM-TD2H68T-10/Q

HM-TD2H68T-5/Q

HM-TD2H68T-18/Q

▪ Dimension



▪ Accessory

▪ Optional

DS-1707ZJ-E
Wall mount



COMPLIANCE NOTICE: The thermal series products might be subject to export controls in various countries or regions, including without limitation, the United States, European Union, United Kingdom and/or other member countries of the Wassenaar Arrangement. Please consult your professional legal or compliance expert or local government authorities for any necessary export license requirements if you intend to transfer, export, re-export the thermal series products between different countries.