QF310
Thermographic Network Box Camera



The Thermographic Network Box Camera with small size, low power consumption and simple integration realizes real-time high-accuracy object temperature measurement.

Features

- High sensitivity sensor with 384 x 288 resolution.
- Object temperature range: -20°C to 150°C, 0 °C to 650 °C; Max (±2 °C, ±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 real-time acquisition of raw data pushed by the device via the network or USB for temperature measurement and image analysis.
- Supports 18 pseudo color modes.

▪ Specification

Thermal Module	
Image Sensor	Vanadium Oxide Uncooled Focal Plane Arrays
Resolution	384 × 288
Pixel Pitch	12 μm
Spectral Range	8 μm to 14 μm
NETD	≤ 30 mk(@25 °C,F#=1.0)
Focal Length	3 mm 4 mm 8 mm 10 mm 18 mm
IFOV	3 mm : 4.00 mrad 4 mm : 3.00 mrad 8 mm : 1.50 mrad 10 mm : 1.20 mrad 18 mm : 0.67 mrad
Field of View	3 mm : 90.0°(H)x65.0°(V) 4 mm : 60.4°(H)x44.9°(V) 8 mm : 34.0°(H)×26.0°(V) 10 mm : 27.0°(H)×20.4°(V) 18 mm : 13.7°(H)x10.4°(V)
Min. Focusing Distance	3 mm : 0.15 m 4 mm : 0.25 m 8 mm : 0.80 m 10 mm : 1.30 m 18 mm : 5.00 m
Aperture	3 mm : F1.00 4 mm : F1.00 8 mm : F1.00 10 mm : F1.15 18 mm : F1.15
Measurement and Analysis	
Object Temperature Range	-20 °C to 150 °C , 0°C to 650 °C
Temperature Accuracy	Max (± 2 °C, ± 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.

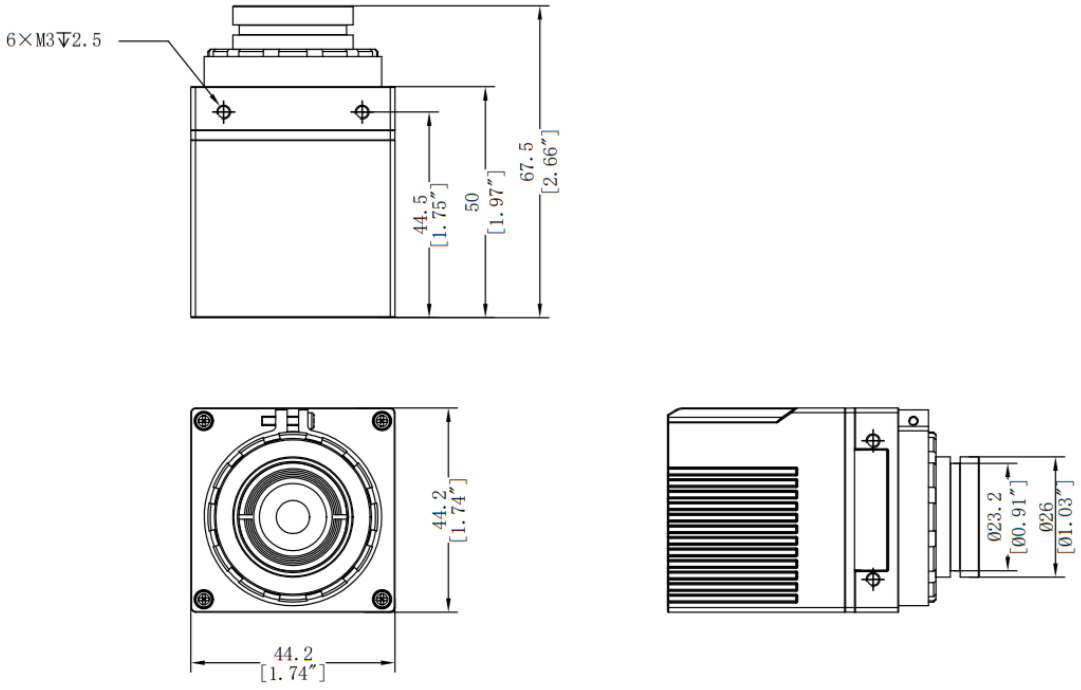
Video and Image	
Main Stream	50 fps (384 × 288)
Video Compression	H.265/H.264/MJPEG
Color Palettes	18 options: White Hot, Black Hot, Fusion 1, Rainbow, Fusion 2, Ironbow 1, Ironbow 2, Speia, Color 1, Color 2, Ice Fire, Rain, Red Hot, Green Hot, Dark Blue, Winter, Summer, Blue Red
Digital Zoom	×2, ×4, ×8
Radiometric Capture	Yes
Radiometric Infrared-Video Streaming (Compressed)	Over RJ45/UVC, 384 x 288@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
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) 1, USB type-c port that supports the UVC protocol
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. 3.2 W
Working Temperature/Humidity	-20 °C to 60 °C 90% or less
Protection Level	IP40
Mount	M3
Weight	3 mm : Approx. 163 g 4 mm : Approx. 165 g 8 mm : Approx. 171 g 10 mm : Approx. 162 g 18 mm : Approx. 162 g

Dimensions	3 mm : 67.5 × 44.2 × 44.2 mm 4 mm : 71.8 × 44.2 × 44.2 mm 8 mm : 79.8 × 44.2 × 44.2 mm 10 mm : 69.8 × 44.2 × 44.2 mm 18 mm : 69.8 × 44.2 × 44.2 mm

▪ Available Model

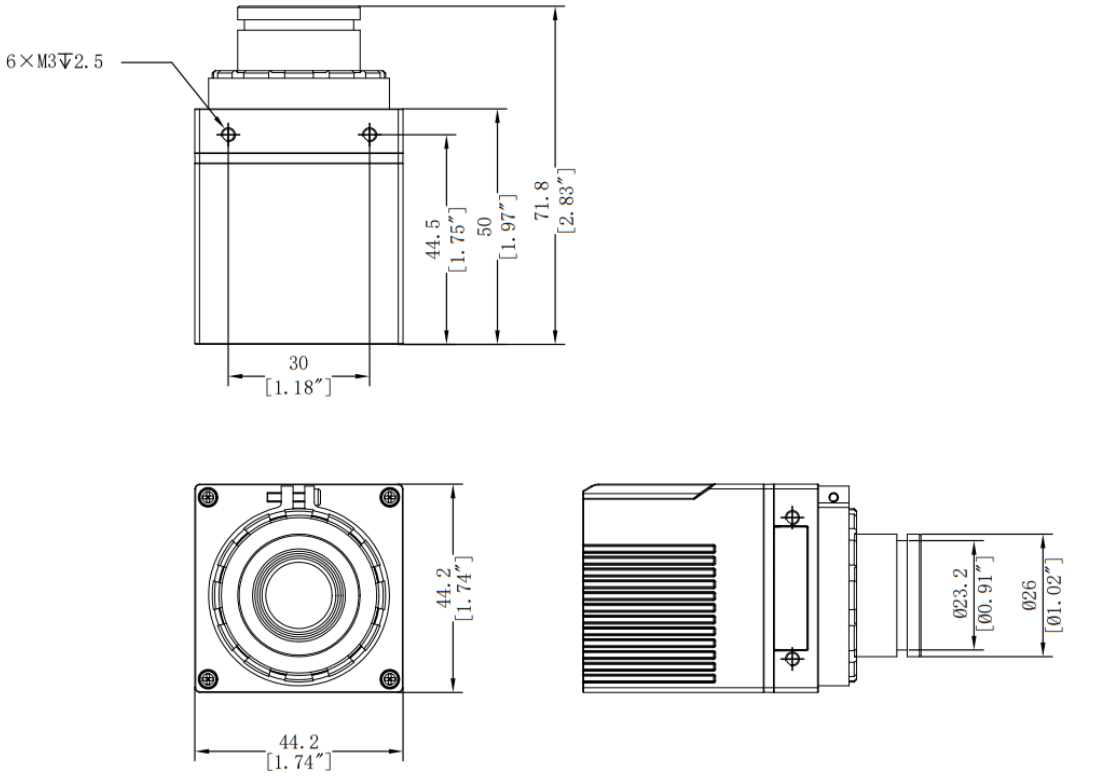
HM-TD2038T-4/Q
HM-TD2038T-8/Q
HM-TD2038T-10/Q
HM-TD2038T-18/Q
HM-TD2038T-3/Q

▪ Dimension



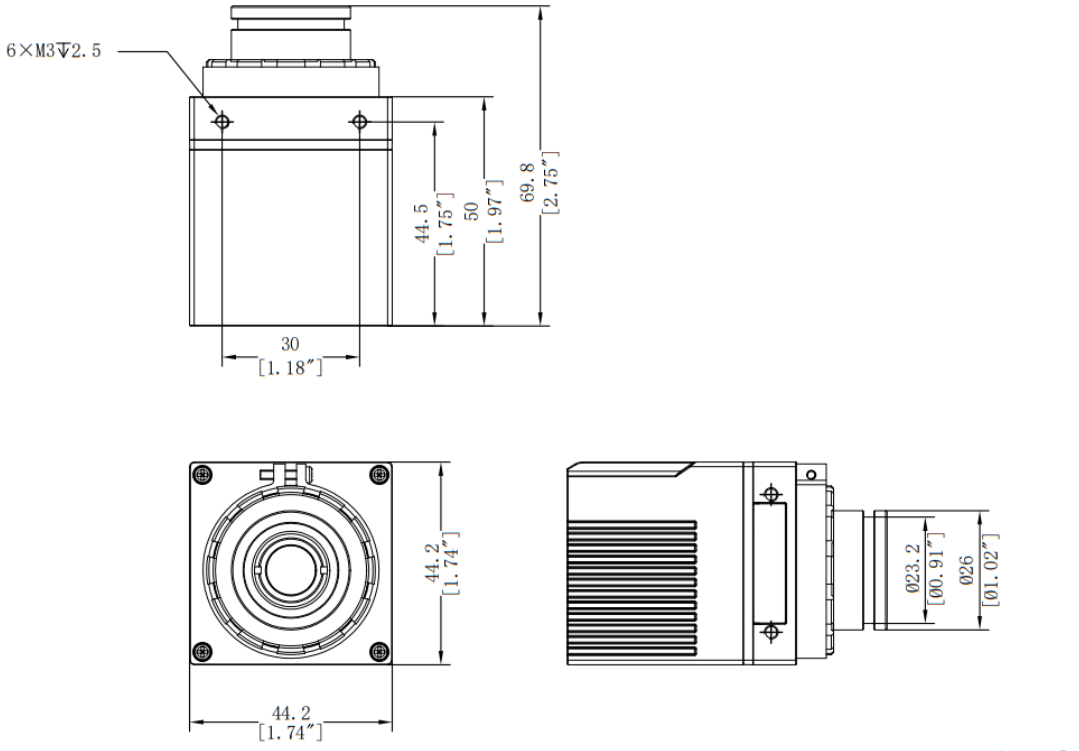
3 mm

Unit:mm[Inch]



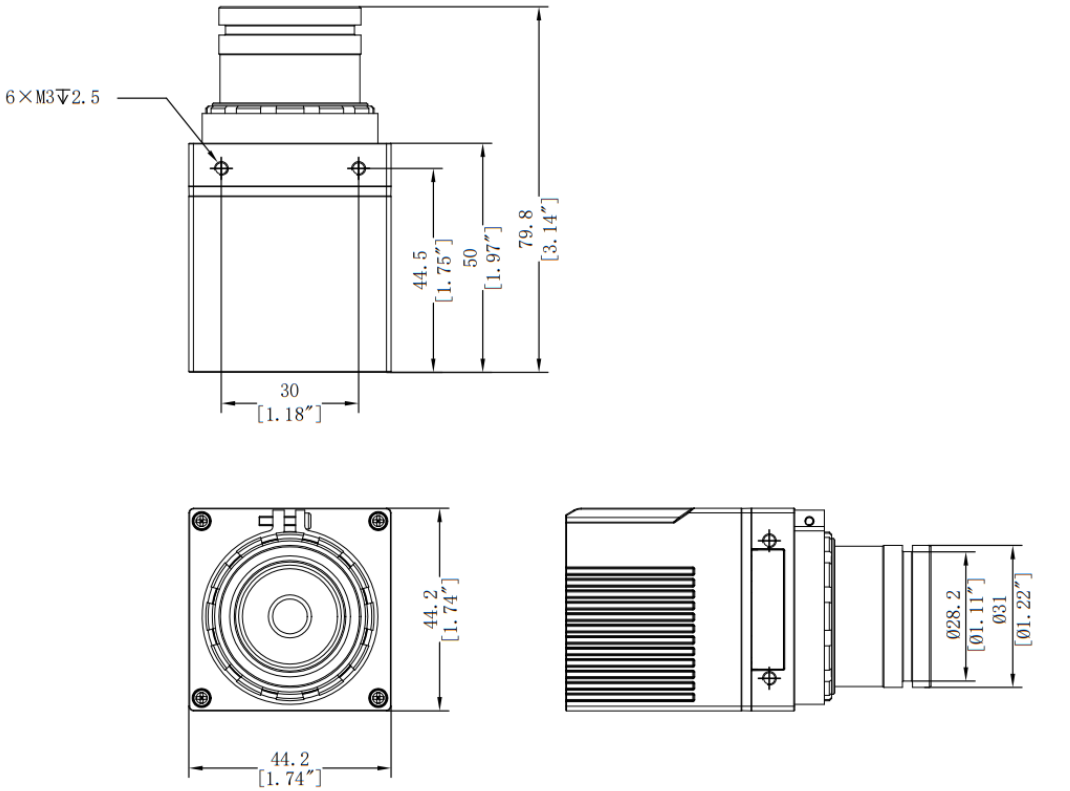
4 mm

Unit:mm[Inch]



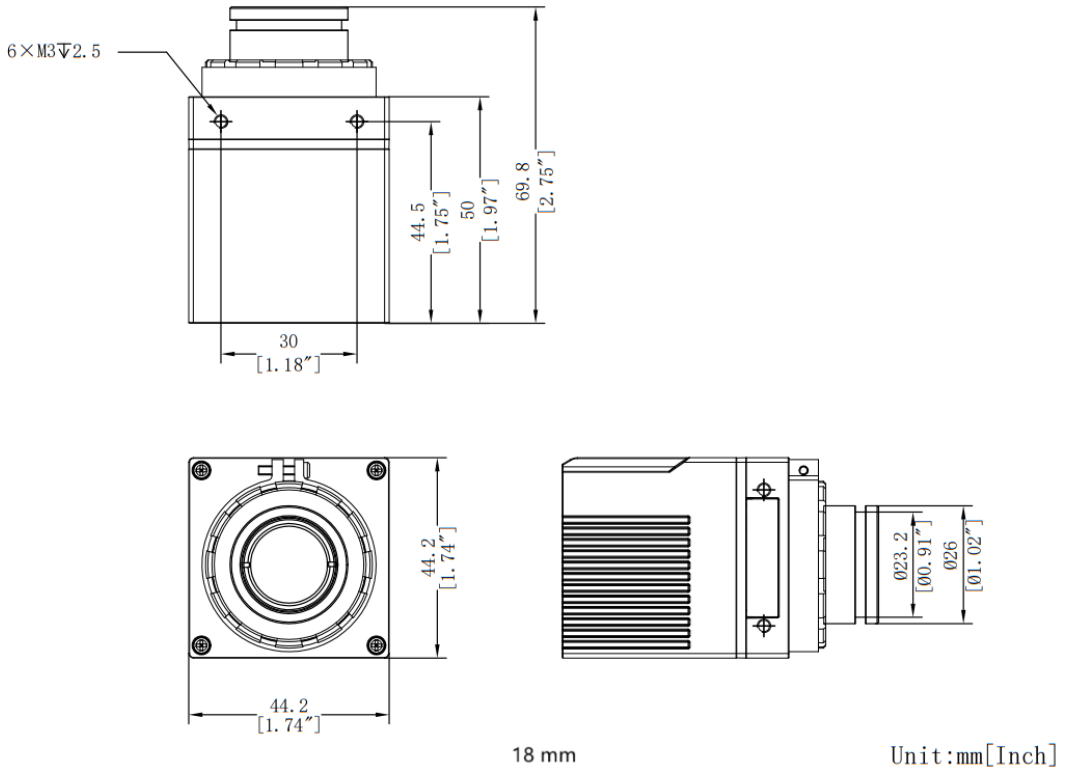
10 mm

Unit:mm[Inch]



8 mm

Unit:mm[Inch]



18 mm

Unit:mm[Inch]

▪ Note

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.



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