



# HIKMICRO

## QX310

### Thermographic Network Box Camera



The High Temperature Box Camera can be combined with 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

- 384 x 288 resolution, high sensitivity sensor
- Object temperature range: 0°C to 800°C (32°F to 1472°F), 300 °C to 2000 °C (5722°F to 3632 °F)
- Temperature measurement at user-defined points, lines, and areas
- A highlighted cross at the max. temperature in the thermal image
- Thermal image frame rate: 50 fps
- Color alarm (isotherm) available for Above, Between, and Below object temperatures

## ▪ Specification

| Thermal Module              |                                                                                                                                                                                           |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Image Sensor                | Vanadium Oxide Uncooled Focal Plane Arrays                                                                                                                                                |
| Resolution                  | 384 x 288                                                                                                                                                                                 |
| Pixel Pitch                 | 12 $\mu$ m                                                                                                                                                                                |
| NETD                        | $\leq 35$ mK (@25° C, F# = 1.0)                                                                                                                                                           |
| Focal Length                | 3 mm                                                                                                                                                                                      |
| IFOV                        | 4 mrad                                                                                                                                                                                    |
| Aperture                    | F2.5                                                                                                                                                                                      |
| Field of View               | 100° × 80.3° (H × V)                                                                                                                                                                      |
| Min. Focusing Distance      | 0.5 m                                                                                                                                                                                     |
| Thermographic Integration   |                                                                                                                                                                                           |
| Temperature Metadata        | Continuous output data of preset thermographic rules and measured temperature                                                                                                             |
| Thermographic Data Encoding | 50 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                                                                                                                                           |
| Measurement and Analysis    |                                                                                                                                                                                           |
| Object Temperature Range    | 0°C to 800°C (32°F to 1472°F), 300 °C to 2000 °C (5722°F to 3632 °F)                                                                                                                      |
| Temperature Accuracy        | Object temperature 100°C to 2000°C (212°F to 3632°F), $\pm 2\%$ for ambient temperature 18°C to 25°C (64.4°F to 77°F) and $\pm 3\%$ for ambient temperature 25°C to 50°C (64.4°F to 77°F) |
| Measurement Presets         | Hot spot, cold spot in real time                                                                                                                                                          |
| Point                       | 10 User Presets                                                                                                                                                                           |
| Line                        | 1 User Presets                                                                                                                                                                            |
| Area                        | 10 User Presets                                                                                                                                                                           |
| Color Alarm (Isotherm)      | Above/Between/Below                                                                                                                                                                       |
| Video and Image             |                                                                                                                                                                                           |
| Main Stream                 | 50 fps ( 1280×720, 704×576, 640×512, 352×288, 384×288 )                                                                                                                                   |
| Video Compression           | H.265/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, RTP, TCP, UDP, IGMP, ICMP, DHCP                                                                         |
| 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), 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/1000 M self-adaptive Ethernet interface<br>1, RS-485 interface (ModBus available) |
| Analog Output           | 1, CVBS output                                                                                       |

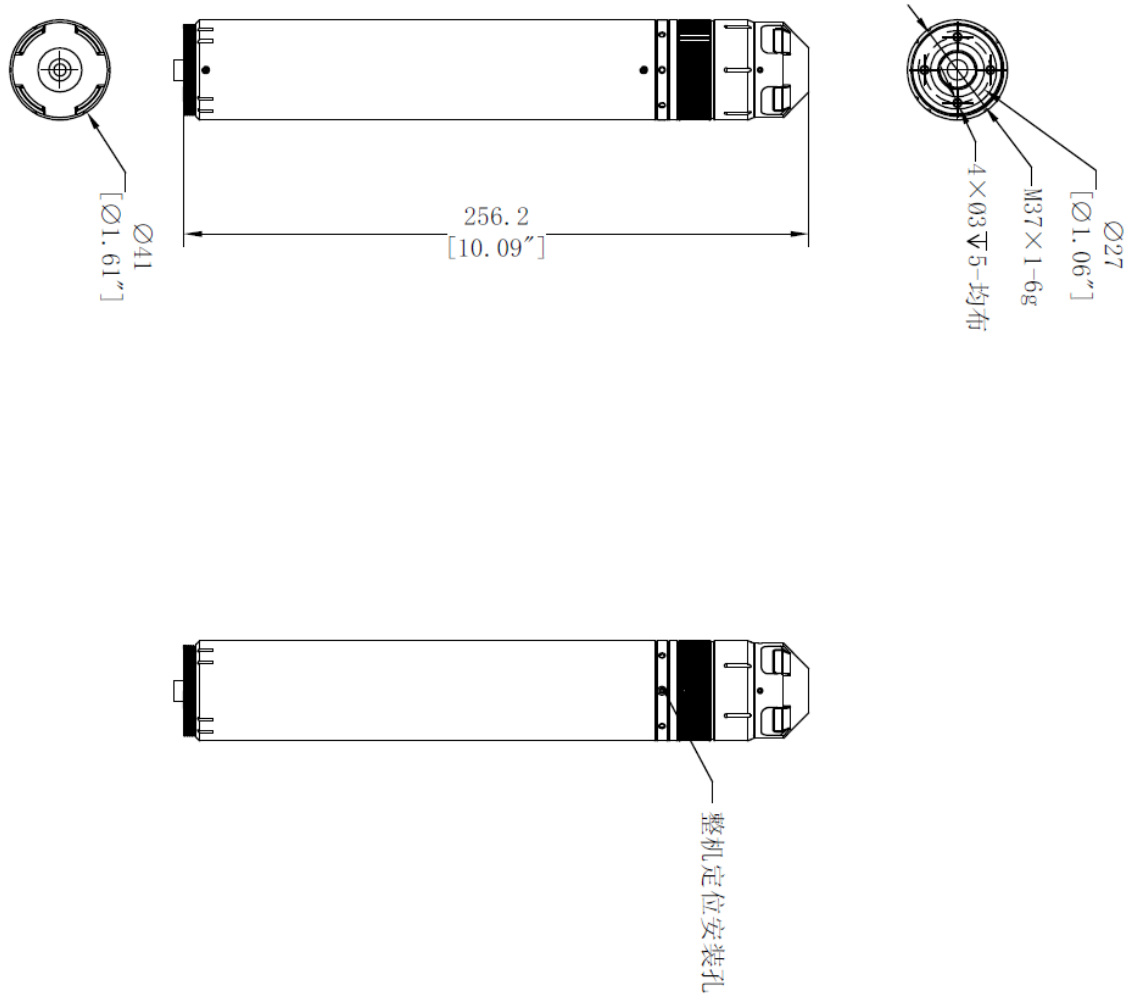
**General**

|                              |                                                  |
|------------------------------|--------------------------------------------------|
| Menu Language                | English                                          |
| Power Supply                 | 10-30 VDC                                        |
| Power Consumption            | 4W Max                                           |
| Working Temperature/Humidity | -0 °C to 60 °C (-32 °F to 140 °F)<br>90% or less |
| Protection Level             | IP67                                             |
| Dimensions                   | φ41mm × 256.2mm(φ1.61" × 10.1")                  |
| Weight                       | Approx. 1133.3 g (2.5 lb)                        |

## ▪ Available Model

HM-TD2A38H1-3X/Q

## ▪ Dimension



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