

QUANTUMRED

Vision, beyond the limits.



Quantum Eye MPDC

For multipurpose projects

Accuracy

Expandability

Efficiency

Accurate temperature
Measurement and
High quality imaging

Supports various video
Formats for multiple
applications

Low cost, space free,
comfortable,
easy installation

It is a high-precision thermal image + real image camera that can accurately measure human body temperature in real time. Built-in Hanwha Systems' patented TRSM module enables accurate heat detection in various environments, and uses intelligent SW to detect real-time heat generators and those not wearing masks to control access. Using NVIDIA Jetson Nano board, AI function can be installed, and it can be used for various projects.

Key Features

- **dual edge camera**
- **Temperature accuracy within $\pm 0.3^{\circ}\text{C}$ (with TRSM)**
- **AI function can be installed**
- **Provides various interfaces such as Ethernet, HDMI, Audio In/Out, and USB**
- **Use in various fields such as human body heat detection, Smart farm, and livestock disease prevention**

Quantum Eye MPDC Technical Specifications

Thermal Camera

Total pixels	320(H) x 240(V) Pixels
Image Sensor Type	Micro Bolometer
Pixel Pitch	12µm
Spectral Band	LWIR 8~14 µm
NETD	< 50mK @F/1.0
Field of View (H x V)	H: 28°, V: 21°, custom
Temperature Measurement Range	Febrile Sensing Mode : +30 °C ~ +40 °C Normal Mode : ~ +140 °C or ~ +500 °C
Temperature Accuracy	Febrile Sensing Mode : ±0.5 °C (w/ TRSM ±0.3 °C) Normal Mode : ±2°C or 2%
Frame Frequency	MAX 30 FPS

Color Cameral

Image Sensor	1/2.8" 2MP CMOS
Effective Pixels	1920 x 1080
Max. Resolution	2MP
Focal Length	4 mm
Aperture	F1.6
Field of View	H: 87.6°, V: 46.4°, D: 104.5°
Frame Frequency	MAX 30 FPS
Focus Mode	Fixed

Interfacel

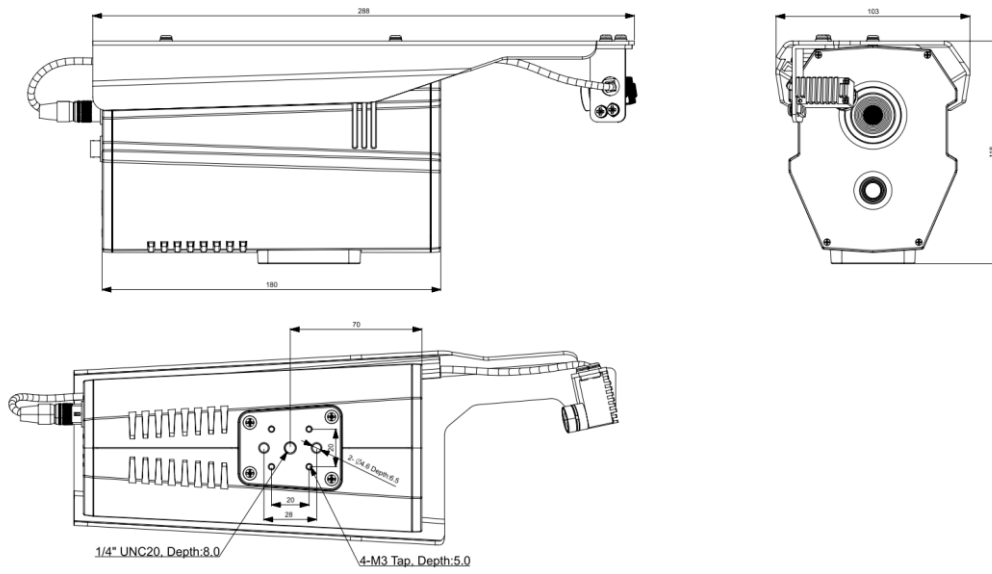
Ethernet(Network)	1000Base-T, RJ-45
Audio Input	1 (Mic In)
Audio Output	1 (Speaker Out)
Alarm Input	1
Alarm Output	1
Micro USB Connector	2
Power LED	1
Reset Botton	1
HDMI	1

Other

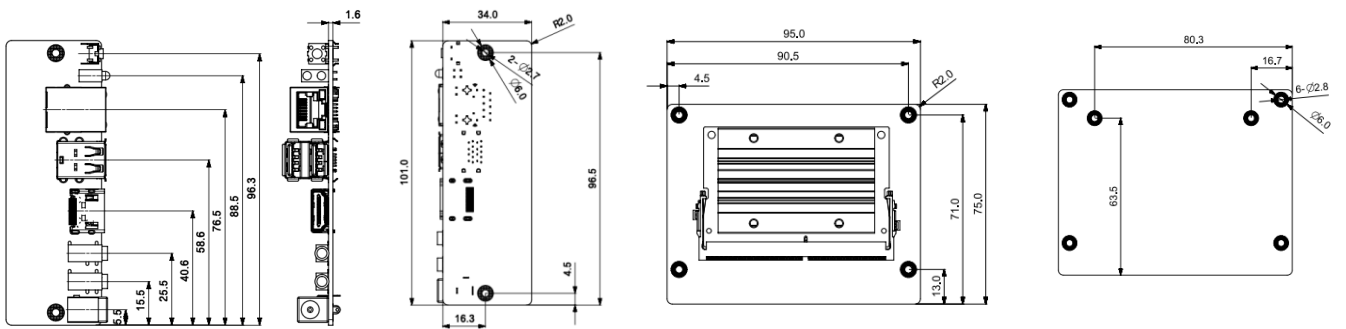
Supply Voltage	DC +12V ±10%
Power	20.0 Watt
Color	Black
Material	Aluminium
External Dimension (H x V x D)	103.0mm x 118.0mm x 288.0mm (TRSM mounting)
Body Weight	1.2 Kg
Operation Temperature	-10°C to +35°C (Humidity: 0%RH ~ 95%RH)
Storage Temperature	-30°C to +60°C (Humidity: 0%RH ~ 95%RH)

Quantum Eye MPDC Dimensions

Exterior Dimension



Jetson nano Interface Dimension



Cover Dimension

