

QUANTUMRED

Vision, beyond the limits.



QuantumRed QR Thermal imaging module for observation

Accuracy

Expandability

Efficiency

Accurate temperature
Measurement and
High quality imaging

Supports various video
Formats for multiple
applications

Low cost, space free,
comfortable,
easy installation

Thermal imaging cameras are less affected by the weather than general daytime cameras, and can collect observation data even at night when there is no light.

Key Features

- **QVGA (320x240) resolution, 30Hz/60Hz**
- **Provides various interfaces such as USB, MIPI, CameraLink, etc.**
- **Use in various fields such as industrial, transportation, ITS, and smart city**

QuantumRed QR Module Technical Specifications

Imaging

Sensor Technology	Uncooled Microbolometer
Array Format	QVGA(320X240)
Pixel Pitch	12 μm
Spectral Range	LWIR 8~14 μm
Thermal Sensitivity (NETD)	<40mK(Premium), <50mK(Industrial), <60mK(General)
Frame Rate	30Hz/60Hz (EL free)
Shutter	With shutter
Accuracy	N/A
Scene Temp. Range	N/A

Mechanical

Size (mm)	33.0(W) x 33.0(H) x 24.3(D) without lens / interface Board
Weight	55g (without lens)

Lens

FOV	11.5° / 28° / 36° / 42° / 50° / 54.4° / custom
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Electrical

Input Voltage	5.0V
Power Consumption	1.2W (without Interface Board)
Video Channel	LVC MOS(12/14bit), BT656, BT1120
	USB(UVC format), Camera-Link(LVDS format), MIPI(CSI-2 format), Analog, Ethernet

Environmental

Operating Temp.	-40°C ~ +80°C
Storage Temp.	-40°C ~ +85°C

QuantumRed Part Numbering

1		2		3		4		5		6		7		8	
Main Purpose		Resolution		Frame/Sec		Lens		HFOV		Grade		Temp. Range		Interface option	
Type	Mark	Type	Mark	Type	Mark	Type	Mark	Type	Mark	Type	Mark	Type	Mark	Type	Mark
Surveillance (Military)	MS	320*240	320A	30Hz	3	Yes	L	5.9°	059	< 40mK	P (Premium)	N/A	000	USB	U
								12.5°	125						
Surveillance	QS			60Hz	6	No	X	17.4°	174	< 50mK	I (Industrial)			Camera-Link	C
								22.8°	228						
								32°	320	< 60mK	G (General)			MIPI	M
								61.1°	611					Analog	A
								75°	750					Ethernet	E
Custom	000					None	N								

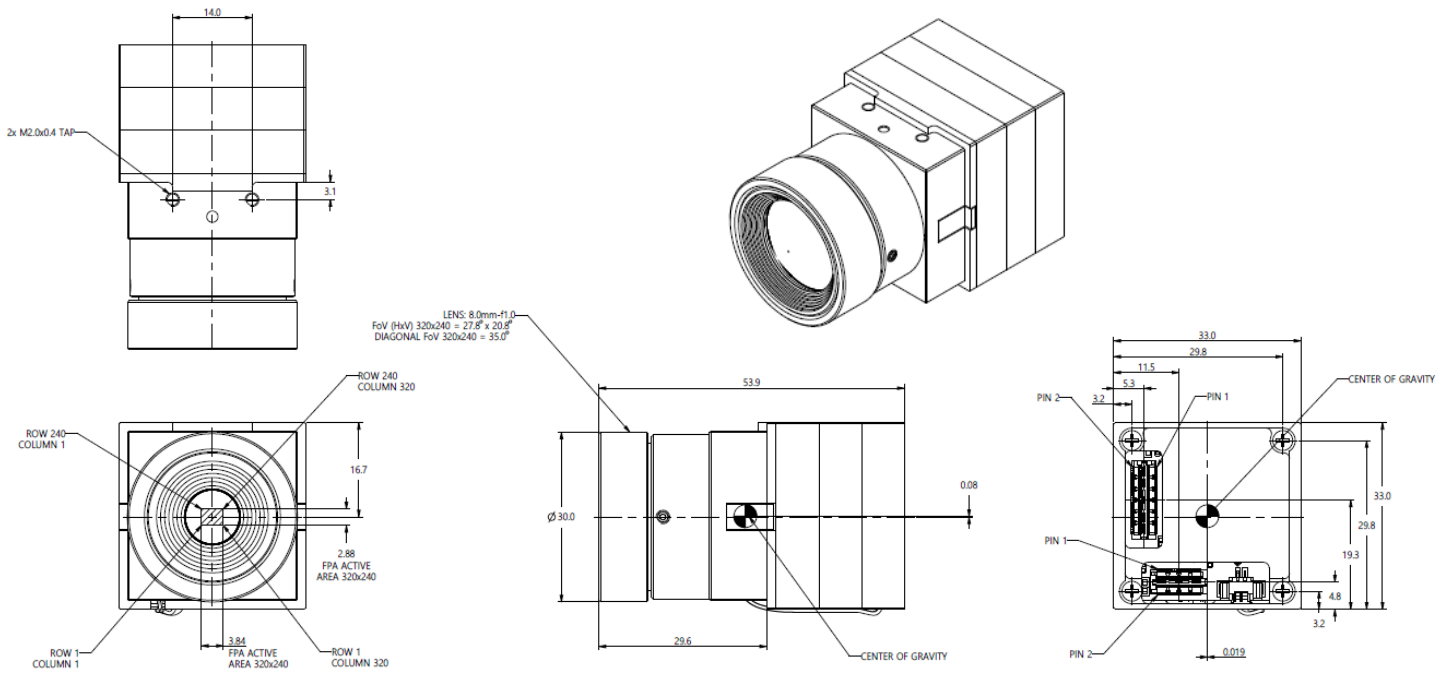
Part Numbering Sample : QS320A3L059I000U



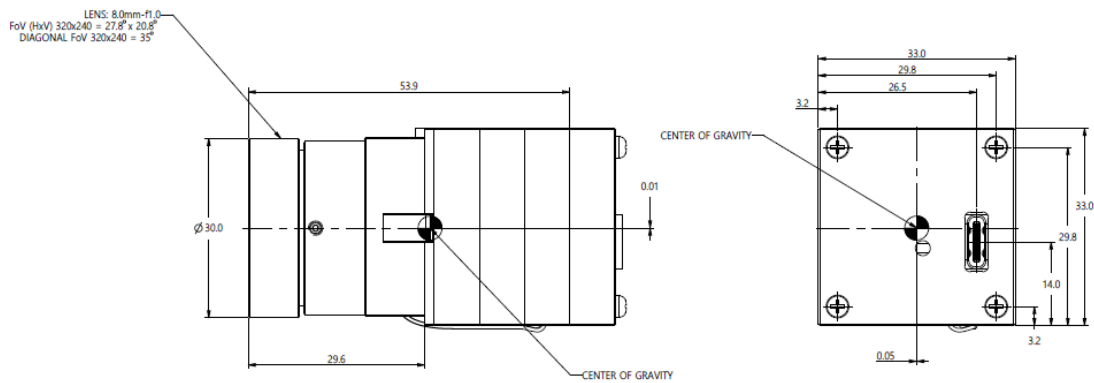
1	2	3	4	5	6	7	8
QS	320A	3	L	059	I	000	U

QuantumRed QR Module Dimensions

Base Module Dimension



USB Interface Dimension



Camera-Link Interface Dimension

