UR6 Series
Uncooled IR Imaging Module

- Compact and Light weight with 21mm*21mm
- High Frame Rate 12um Vox infrared Detector and High Performance infrared ISP chips
- MIPI and USB interface for Raspberry Pi5 and NVIDIA Jetson Series



FIRA VISION

IR IMAGING MODULE

SPECIFICATION	
Model	UR6 Series
Imaging & Optical	
Detector Type	Vox Uncooled Microbolometer
Resolution	640×512@12μm
Spectral Range	8 μm ~ 14 μm
Image Frequency	30Hz/60Hz
NETD	≤40mK@F1.0 25℃
Lens Focal Length	4.6mm/9.1mm/13mm/15mm/19mm/25mm/35mm
Thermal Time Constant	<12ms
NUC Correction	Shutter/Shutter less algorithm correction
Digital Zoom	1x-8x continuous zoom(step size: 0.1)
Image Mirroring	Vertical/Horizontal/Diagonal
Video Output	UVC(USB 2.0)/MIPI//CVBS/DVP/BT656
Power Supply	5V DC
Palette	White Hot/Black Hot/Various palettes supported
Power Consumption	<0.7W
Communication Interface	UART(TTL 3.3V)/I²C/USB2.0
Size	21mm*21mm*10.3mm(WxHxL) Without lens
Weight	≤8.6g (Without lens)
Humidity	5%RH ~ 95%RH, non-condensing
Working Temperature	-40℃~+60℃
Storage Temperature	-50℃~+70℃
Vibration	6.06g, random vibration, all axes
Shock	80g, 4ms, final peak sawtooth wave, three axes and six directions
Extensible Features	PIP, AHD/SDI/cameralink output, Crosshairs, Hot tracking, 25/50Hz rating, Lens driving (zooming, Electric and auto focusing)

UR6 Series
Uncooled IR Imaging Module

1.7m×0.5m

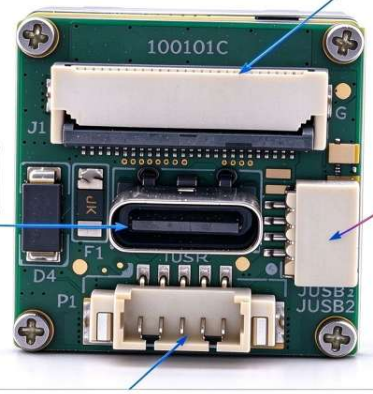
4.6m×2.3m

Lens	FOV	Detection	Recognition	Identification	Detection	Recognition	Identification
f4.6mm F1	79.71° x 67.47°	325m	108m	54m	881m	293m	146m
f9.1mm F1	45.76° x 37.31°	644m	214m	107m	1740m	581m	290m
f13mm F1	32.91° x 26.59°	920m	306m	153m	2490m	830m	415m
f15mm F1	28.72° x 26.15°	1006m	354m	177m	2880m	958m	479m
f19mm F1	22.85° x 18.37°	1350m	448m	224m	3640m	1210m	606m
f25mm F1	17.46° x 14.01°	1770m	590m	295m	4790m	1600m	798m
f35mm F1	12.52° x 10.03°	2480m	826m	413m	6710m	2240m	1120m

DVP Port
Digital Video Port
Digital signals, UART, power supply, etc.

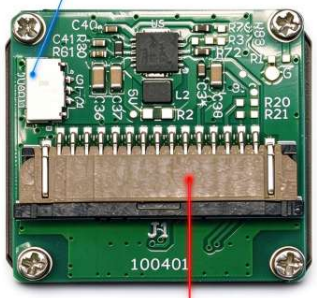
Type C Port
Power supply + USB2.0 video out

JST 4-Pin USB
Alternative USB power & data interface for embedded wiring



UART / CVBS
UART: Serial command/debug port;
CVBS: Composite analog video output for analog monitor

0.8mm 3-Pin
UART: Serial command/debug port;



15Pin MIPI Port
For Raspberry Pi 5, Jetson Nano







IR IMAGING MODULE

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