

NDAA COMPATIBLE



Detector Array Format	SXGA - YFLW1280-12 Vox (NOVATEK SOC) Microbolometer	SXGA- HFLW1280-12 Vox (FPGA with LYNRED Microbolometer)
Resolution	1280 x 1024	
Pixel pitch	12µm	
Spectral Bandwidth (µm)	8 ~ 14µm	
NETD (mk)	≤40mk (@f/1.0, 300K)	≤50mk (@f/1.0, 300K)
Environmental Parameters		
Operating Temperature	-40°C ~ 60°C	
Storage Temperature	-45°C ~ 65°C	
Humidity	5% ~ 95% Non-Condensing	
Object Temperature Range	-20°C ~ 150°C	
Radiometry Accuracy	±2°C (@ Ambient -20°C~60°C ±2%)	
Image Processing & Adjustment		
Non-Uniformity Calibration	Dynamic Correction with Shutter 0.3s	
Image Output	1280 x 1024	
Color Palette	White Hot Black Hot Iron Red Rainbow	
Electronic Amplification	x2, x4, x8	
Contrast/Brightness	Manual	
Image Flip	Support	
Image Enhancement DDE	Support	
Frame Rate	25 Hz	60 Hz
Scene Dynamic Range	High gain: 40°C ~ 150 °C Low gain: 200°C~500°C (Optional)	
Power & Interface		
Input Voltage Range	5.5V or 3V ~ 4.2V	
Power Consumption	2.5W	
Video Channels	USB 3.0 or BT1120	
Video Format	MPEG or YUV	
Control Channels	I ² C or UART	
Shock	1.5kg @ 0.4 msec	
Electrostatic Discharge Protection Devices (ESD)	EN 61000-4-2 Level4	
Physical Feature		
Dimension (Core without lens)	35 x 35 x 32 mm	45 x 45 x 31 mm
Weight (Core without lens)	<100g	<102g
Lens Options		
Effective Focal Length Field of View (FOV)	25 mm (standard) FOV 24.5° x 19.8° ((optional for other manual continuous zoom/ MOTORIZED from WFOV 15mm up to customized NFOV)	35 mm (standard) FOV 24.5° x 19.8° ((optional for other manual continuous zoom/ MOTORIZED from WFOV 15mm up to customized NFOV)

NDAA COMPATIBLE



Detector Array Format	VGA - YFLW640-12 QVGA - YFLW384-12 Vox (NOVATEK SOC) Microbolometer
Resolution	640 x 512 384 x 288
Pixel pitch	12µm
Spectral Bandwidth (µm)	8 ~ 14µm
NETD (mk)	≤40mk (@f/1.0, 300K)
Environmental Parameters	
Operating Temperature	-30°C ~ 60°C
Storage Temperature	-40°C ~ 70°C
Humidity	≤90%
Object Temperature Range	-20°C ~ 150°C
Radiometry Accuracy	±2°C (@ Ambient -20°C~60°C ±2%)
Image Processing & Adjustment	
Non-Uniformity Calibration	Dynamic Correction with Shutter 0.3s
Image Output	640 x 512
Color Palette	White Hot Black Hot Iron Red Rainbow
Electronic Amplification	x2, x4, x8
Contrast/Brightness	Manual
Image Flip	Support
Image Enhancement DDE	Support
Frame Rate	25 Hz
Scene Dynamic Range	High gain: 40°C ~ 150 °C Low gain: 200°C~500°C (Optional)
Power & Interface	
Input Voltage Range	5V
Power Consumption	0.9W
Video / Peripheral Channels	USB2.0
Image Format	MPEG
Control Channels	UART
Physical Feature	
Dimension (Core without lens)	26 x 26 x 40 mm
Weight (Core without lens)	<34g
Lens Options	
Effective Focal Length Field of View (FOV)	13.5 mm (standard) FOV 32.91° x 26.59° 7 mm FOV 57.5° x 47.39° 10 mm FOV 42.01° x 34.15° 13 mm FOV 32.91° x 26.59° 19 mm FOV 22.85° x 18.37° (optional for other manual continuous zoom/ MOTORIZED from WFOV 15mm up to customized NFOV)



Detector Array Format	VGA - HFLW640-17 Vox (FPGA with LYNRED Microbolometer)
Resolution	640 x 480
Pixel pitch	17µm
Spectral Bandwidth (µm)	8 ~ 14µm
NETD (mk)	≤30mk (@f/1.0, 300K)
Environmental Parameters	
Operating Temperature	-40°C ~ 60°C
Storage Temperature	-45°C ~ 65°C
Humidity	5% ~ 95% Non-Condensing
Object Temperature Range	-20°C ~ 150°C
Radiometry Accuracy	±2°C (@ Ambient -20°C~60°C ±2%)
Image Processing & Adjustment	
Non-Uniformity Calibration	Dynamic Correction with Shutter 0.3s
Image Output	640 x 480
Color Palette	White Hot Black Hot Iron Red Rainbow
Electronic Amplification	x2, x4, x8
Contrast/Brightness	Manual
Image Flip	Support
Image Enhancement DDE	Support
Frame Rate	60 Hz
Scene Dynamic Range	High gain: 40°C ~ 150 °C Low gain: 200°C~500°C (Optional)
Power & Interface	
Input Voltage Range	5V or 3V ~ 4.2V
Power Consumption	<1.7W
Video Channels	USB2.0 or BT656
Image Format	MPEG or YUV
Control Channels	I ² C or UART
Shock	1.5kg @ 0.4 msec
Electrostatic Discharge Protection Devices (ESD)	EN 61000-4-2 Level4
Physical Feature	
Dimension (Core without lens)	29 x 29 x 34 mm
Weight (Core without lens)	<65g
Lens Options	
Effective Focal Length Field of View (FOV)	19 mm (standard) FOV: 31.9° x 25.8° 9 mm FOV: 62.3° x 48.7° (Continuous ZOOM/ MOTORIZED Optional from WFOV 15mm up to NFOV below:) 50 mm FOV: 12.4° x 9.3° 100 mm FOV: 6.2° x 4.6° (optional for other NFOVs)