

- ▲ Sony Visible + SWIR CMOS Image Sensor
- ▲ SWIR and Visible Sensing Capability
- ▲ Global Shutter
- ▲ High Sensitivity and Low Readout Noise
- ▲ 0.33M Resolution
- ▲ Trigger Mode Supported
- ▲ GigE Vision Supported



Latest Sensor Technology

The new developed SWIR image sensor is capable to sense from 400nm spectral to 1700nm spectral simultaneously, and the max 85% QE is achieved at 1200nm.

Through the new developed manufacturing process and design, this new sensor reduces the defective pixels and improve the uniformity greatly. It also enables us to reduce the pixel size to achieve 1.3M resolution from VGA format.

★ The SenSWIR logo is trademark of Sony Corporation.



Long Distance Capability

Gigabit Ethernet interface enables long distance application with a maximum cable length of 100m. Power over Ethernet (PoE) allows data and power transmission over one cable, reducing installation and maintenance efforts.



Easy Integration

Compatible with GigE vision and GenICam standards, FE Series offers smooth end-to-end configuration interface which reduces the integration effort and accelerates system deployment.



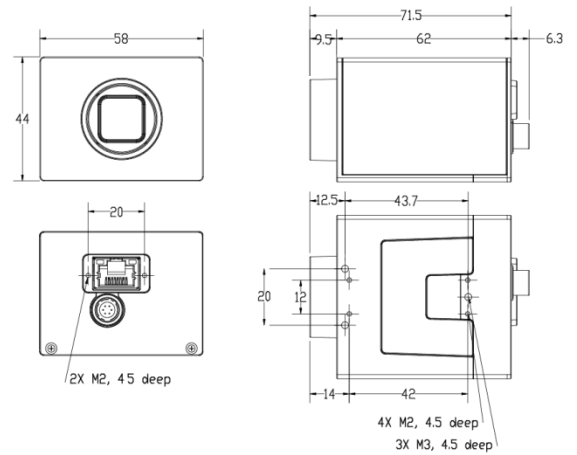
Features

- SONY Visible + SWIR Image Sensor
- Global Shutter
- 0.33M resolution
- External Trigger and Software Trigger
- Trigger with minimum latency and jitter
- Easy integration by API library
- Accurate clock synchronization
- Extensive firmware features
- Onboard frame buffer

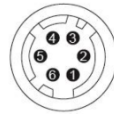
Specification

Model	FE-W4-M
Sensor	Sony IMX991
Sensor Size	1/4"
Sensor Technology	SWIR Global Shutter, TEC Included
Resolution (pixels)	H x V= 640 x 512 (0.33M)
Pixel Size	5 μ m
Frame Rate	136fps @ 8-bit
Read-out modes	Full – 640x512 ROI – with X offset and width in 2-pixel steps, with Y offset and height in 2-line steps
Type	Mono
Camera	
SNR	51dB
Interface	GigE
Video Output Format	8, 12 bit
Gain	0dB ~ +42dB
Synchronization	hardware trigger, software trigger, free-run
Trigger Input	trigger source, opto-isolated, GPIO, software
Trigger modes	exposure mode, timed, trigger width
Electronic Shutter	13 μ s to 29.999991 sec
Power Requirements	8~24VDC or PoE
Power Consumption	10W
Mechanical Design	
Lens Mount	C Mount
Dimensions	W=58mm, H=44mm, L=62mm
Weight	219 g
Operation Temperature	0°~50°C
Storage Temperature	TBD
Humidity	20 – 80%, non-condensing
Standard	
Compliance	EMC: CE / FCC
Protocol Standard	GigE Vision, GenICam

Dimension

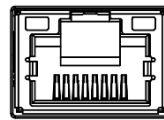


DC Input/Trigger



1	8~24V DC power
2	Opto-isolated input
3	GPIO (non-isolate) software control
4	Opto-isolated output
5	Opto-isolated ground
6	Camera power ground

GigE Interface



1	TRD+ (0)
2	TRD- (0)
3	TRD+ (1)
4	TRD+ (2)
5	TRD- (2)
6	TRD- (1)
7	TRD+ (3)
8	TRD- (3)

Spectral Sensitivity

