

## SHORT WAVE INFRARED CAMERAS.

The FAST-SWIR camera line is the fastest infrared camera line available in the SWIR band. Ideal for analyzing dynamic events, the FAST-SWIR infrared cameras are also highly sensitive, thanks to their unique low noise detector.



The FAST-S800

## KEY BENEFITS

### HIGH FRAME RATE

High performance electronics produce thermal images at rates of up to 1 730 fps. Subwindows can even be acquired at rates higher than 150 000 fps, depending on the model and selected subwindow size.

Camera Link interface ensures reliable, lossless data transfer.

### SPECTRAL BAND OPTIONS

Standard SWIR detector covers 0.9 to 1.7  $\mu\text{m}$ . Optional VSWIR detector covers from 0.4  $\mu\text{m}$  to 1.7.

### HIGH SENSITIVITY

Peak QE is 80% while dark current is as low as  $0.1 \times 10^6$  e-/s/pixel.

### OPTIC MOUNTS

The camera comes with a C-mount interface, allowing the use of a wide variety of commercial and custom lenses.

## EXAMPLES OF TYPICAL USES

IR Signature



Target Ranging



Courtesy of Office of Naval Research and US Army Night Vision and Electronic Sensors Directorate

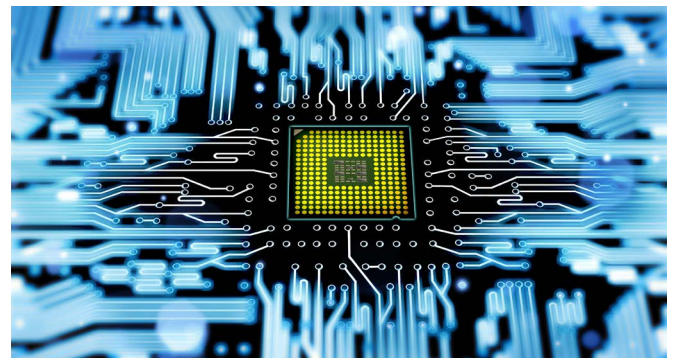
FAST-SWIR Series.		
SPECIFICATIONS	FAST S800	FAST S2k
PIXEL SIZE	20 $\mu\text{m}$ x 20 $\mu\text{m}$	
SPECTRAL BAND	0.9 $\mu\text{m}$ to 1.7 $\mu\text{m}$ opt.: 0.4 $\mu\text{m}$ to 1.7 $\mu\text{m}$ (VisNIR)	
SPATIAL RESOLUTION	640 x 512 pixels	
WINDOW OF INTEREST	Yes   Minimum size 32 x 4 pixels	
MAXIMUM FRAME RATE (FULL WINDOW)	865 Hz	1 730 Hz
MAXIMUM FRAME RATE (IN SUBWINDOW)	33 000 Hz @ 32 x 32	150 000 Hz @ 32 x 4
ROIC NOISE	High gain: 138 e-	
DARK CURRENT	<0.1 x 10 <sup>6</sup> e-/s/pixel at 288k	
EXPOSURE TIME RANGE	1 $\mu\text{s}$ up 40 ms @ 25 °C sensor temperature (high gain mode)	

Specifications are subject to change without notice. Other configurations are available upon request.

Welding



Semiconductor analysis



OTHER SPECS & FEATURES	
Camera Control	Camera Link (Serial LVDS Line on Camera Link Port 1)
Camera Cooling	Forced Air Cooling
Ambient Operating Temperature	0 °C to 50 °C
Dimensions	140 W x 135 H x 90 L mm
Weight (Camera Head)	2 kg



FOR MORE INFORMATION | [TELOPS.COM](http://TELOPS.COM)

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