



The IP-67 certified enclosure.

HIGH-DEFINITION THERMAL INFRARED CAMERAS WITH UP TO 3 MEGAPIXELS.

The HD and Super HD Series are high-performance thermal infrared cameras designed to provide unprecedented image quality with crisp imaging of sharp targets while maintaining an excellent thermal sensitivity. They feature Telops' unique real-time calibration and provide unique capabilities in applications that require large image coverage.

KEY BENEFITS

HIGH DEFINITION

The FAST HD series with 1.3 megapixel image resolution allows the measurement of targets in fine detail, with high thermal sensitivity and using fast frame rates. This series is ideal for most general purpose IR imaging applications, including experimental mechanics and nondestructive testing (NDT).

SUPER HIGH DEFINITION

The FAST sHD Series offers unique 3 megapixel capabilities to meet the requirements of the most challenging measurement scenarios. They will be a tool of choice for a wide variety of applications such as IR signature and ranging.

WIDE SPECTRAL BAND

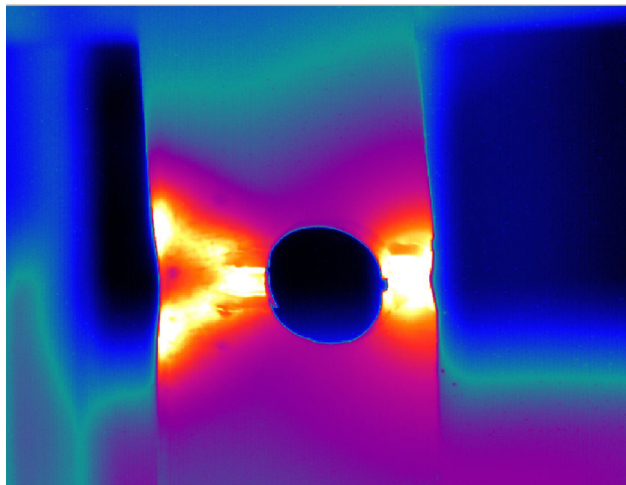
The HD and sHD series provide a wide spectral response to meet the requirements of most scientific measurements.

ADVANCED CALIBRATION

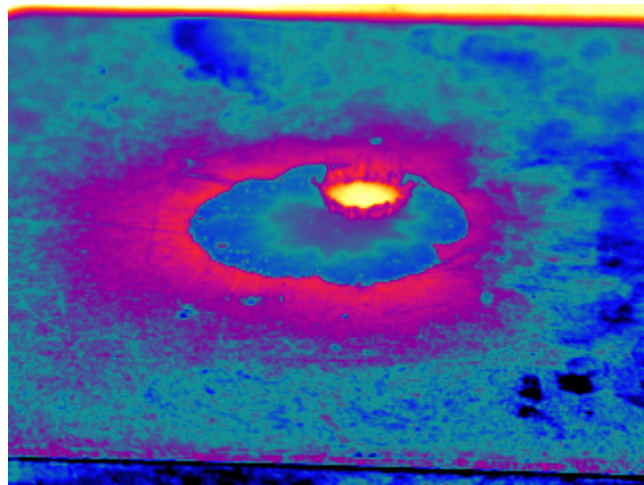
The series feature Telops' proprietary real-time processing of infrared images, including NUC, radiance and radiometric temperature, automated exposure control (AEC) and enhanced high-dynamic-range imaging (EHDRI). With these unique features, scientists benefit from ease of use and of operation flexibility while getting accurate measurements over the entire camera's operation range.

EXAMPLES OF TYPICAL USES

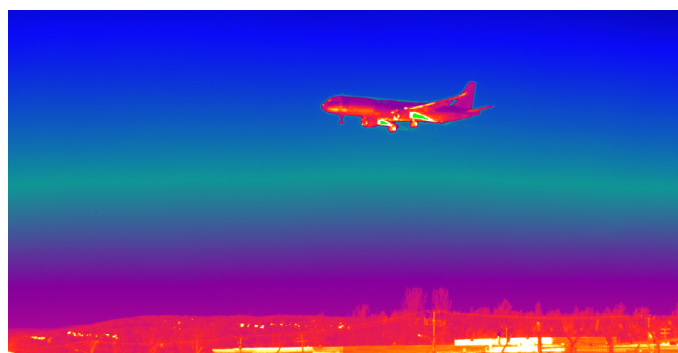
Experimental Mechanics & NDT



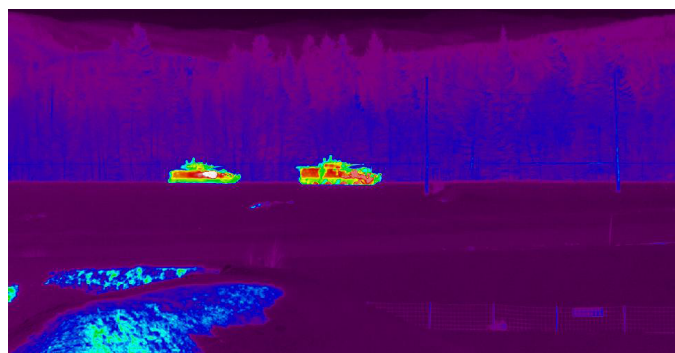
Fluid Thermodynamics



FAST SERIES HD & SHD				
SPECIFICATIONS	FAST M3Shd	FAST M2Shd	FAST M200hd	FAST M100hd
DETECTOR TYPE	Cooled InSb			
SPECTRAL RANGE	1.5 μ m to 5.4 μ m		1.5 μ m to 5.4 μ m (3 to 5 μ m optional)	
SPATIAL RESOLUTION	1920 \times 1536 pixels	1520 \times 1536 pixels	1280 \times 1024 pixels	1280 \times 1024 pixels
DETECTOR PITCH	10 μ m			
APERTURE SIZE	F/3			
FRAME RATE	113 Hz	50 Hz	180 Hz	100 Hz
MAXIMUM FRAME RATE	2 200 Hz @ 64 \times 8	1 300 Hz @ 64 \times 8	2 180 Hz @ 64 \times 4	1 200 Hz @ 64 \times 4
OPERATIONAL TEMPERATURE	-20 $^{\circ}$ C to +50 $^{\circ}$ C			
STORAGE TEMPERATURE	-40 $^{\circ}$ C to +70 $^{\circ}$ C			
TYPICAL NETD	30 mK			
LENS MOUNT	Threaded interface			



Engine Signature Measurement & Ranging



Military Vehicle Signature Measurement & Ranging

OTHER SPECS & FEATURES	
Rotary-stirling closed cycle sensor cooling	Gig-E
Blackbody-free permanent calibration (up to 150 $^{\circ}$ C)	Camera Link
Temperature calibration range upon request	Trigger In, Trigger Out
16 bits dynamic range	SDI, GPS, IRIG-B, RS232 and thermistor ports
High-speed internal memory buffer: up to 32 GB	Lock-In recording
Enhanced high-dynamic-range imaging (EHDMI)	Size w/o lens: 12.6" \times 7.8" \times 6.9" 321 mm \times 199 mm \times 176 mm

FOR MORE INFORMATION | TELOPS.COM

TELOPS HEADQUARTERS
 contact@telops.com
 Tel.: +1 (418) 864-7808

TELOPS USA
 vince.morton@telops.com
 Tel.: +1 (831) 419-7507

TELOPS FRANCE
 eric.guyot@telops.com
 Tel.: +33 1 70 27 71 34

TELOPS CHINA
 zhaoyongg@vip.sina.com
 Tel.: +86 13801185178