



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

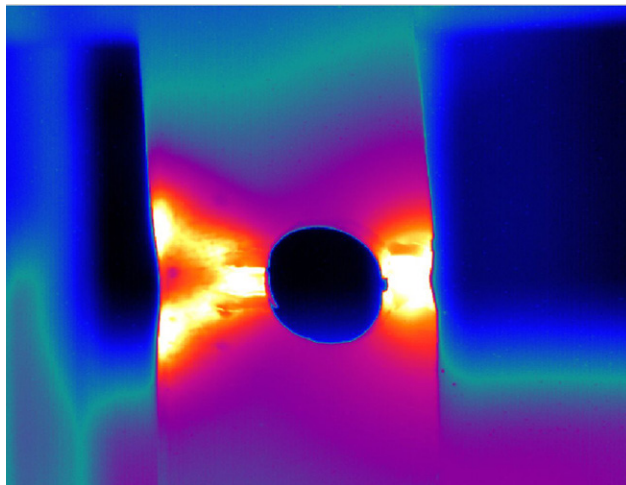
The HD and sHD series provide a wide spectral response to meet the requirements of most scientific measurements.

ADVANCED CALIBRATION

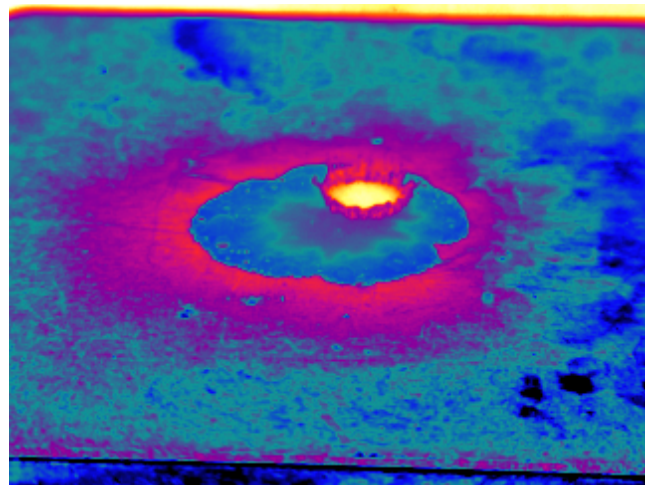
The series feature Telops' proprietary real-time processing of infrared images, including NUC, radiance and radiometric temperature, automated exposure control (AEC) and enhanced high-dynamic-range imaging (EHDRI). With these unique features, scientists benefit from ease of use and of operation flexibility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

EXAMPLES OF TYPICAL USES

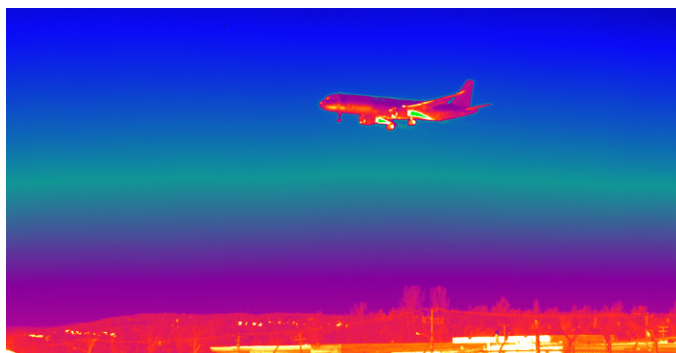
Experimental Mechanics & NDT



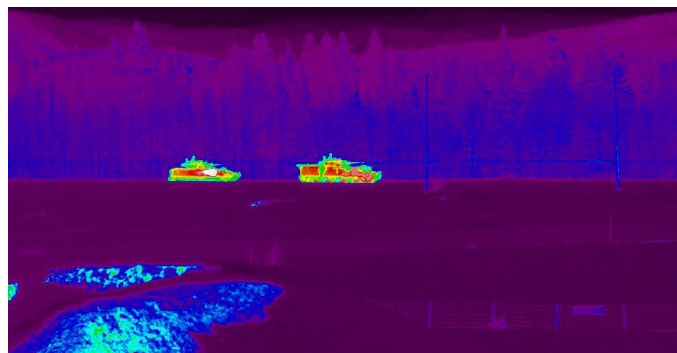
Fluid Thermodynamics



| 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 | 90 Hz | 50 Hz | 180 Hz | 100 Hz |
| MAXIMUM FRAME RATE | 2 570 Hz @ 64 \times 2 | 1 425 Hz @ 64 \times 2 | 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 | Bayonet 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

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