

HIGH-PERFORMANCE  
FAST CAMERAS

TELOPS  
EXOSENS GROUP

# FAST M2k UD



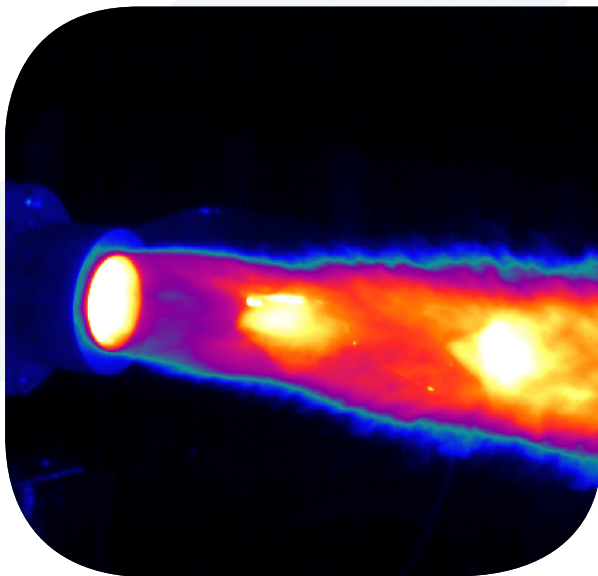
HIGH-SPEED VGA-FORMAT  
SCIENTIFIC THERMAL IMAGING

## KEY FEATURES

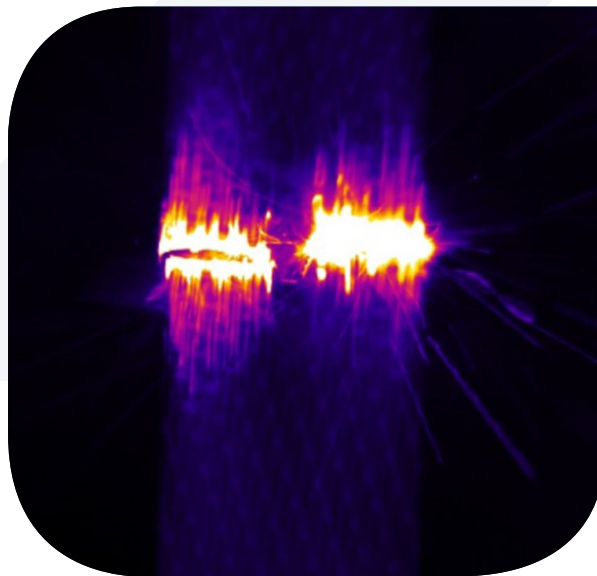
-  **HIGH SPEED DATA ACQUISITION CAPABILITIES**
-  **LARGE FORMAT IMAGERY**
-  **TELOPS REAL-TIME TEMPERATURE CALIBRATION (RTTC)**
-  **AUTOMATIC EXPOSURE CONTROL (AEC)**

Introducing the FAST M2k UD, a scientific infrared imaging system capable of delivering calibrated thermal imagery at 640 x 512 pixel resolution at up to 1500 Hz. Building on an established expertise in developing high-speed scientific infrared imaging systems, the M2k UD provides a combination of image format and data acquisition speed capabilities that is unique in the market. The M2k UD is designed to provide users with an "ultra definition" imaging capability, allowing for characterization of thermal events in fine detail across both the spatial and temporal regimes.

# FAST M2k UD



Pulsed Detonation Rocket Engine



Composite Fiber Tensile Strength Testing

## SPECIFICATIONS

Detector Type	Cooled InSb
Detector Format	640 x 512 pixels
Spectral Range	1.5 – 5.4 $\mu\text{m}$ (3.0 – 5.4 $\mu\text{m}$ optional)
Detector Pitch	25 $\mu\text{m}$
Frame Rate (640 x 512)	1,500 Hz
Frame Rate (320 x 256)	3,300 Hz
Frame Rate (128 x 128)	6,800 Hz
Frame Rate (64 x 8)	42,000 Hz
Environmental Resistance	IP67
Operational Temperature	-20 °C to +50 °C
Storage Temperature	-35 °C to +60 °C
Typical NETD	$\leq 23$ mK
Exposure Time	0.5 $\mu\text{s}$ to full frame rate
Lens Mount	Threaded

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