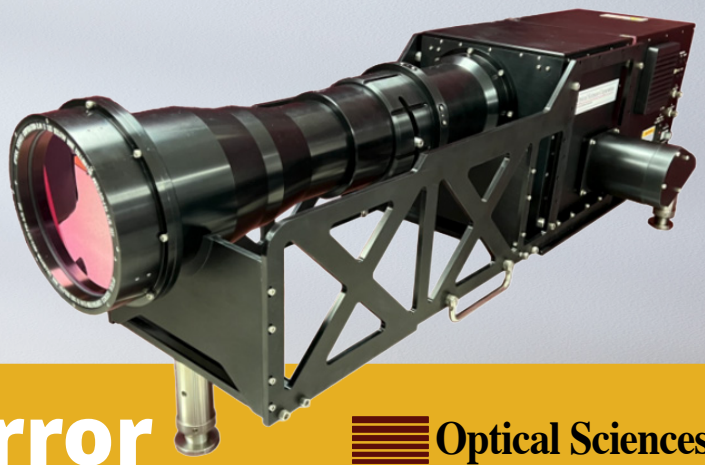
VALKYRIE



Dual Band Micromirror Array Projector System (MAPS)

Optical Sciences

Combine two synchronized projection engines to create a multi-spectral simulated environment that increases missile seeker testing & evaluation and countermeasure validation. Valkyrie Enterprises' Dual Band Micromirror Array Projection System (MAPS) integrates two digital micromirror devices (DMD) projection engines to beam mid-wave (MWIR) and long-wave infrared (LWIR) stimuli to perform next-generation electro-optical/infrared testing.

DUAL SPECTRAL CHANNELS
Simultaneous or alternating multi-band projection.

INTERCHANGEABLE COLLIMATORS
Rapidly switch between MWIR and LWIR configurations.

HIGH TEMPERATURE
650K+ apparent temperature for realistic IR signature replication.

www.valkyrie.com
Contact Us:
michael.mohawk@valkyrie.com
@Valkyrie2007
@ValkyrieEnterprisesInc

Dual-Band MAPS utilizes twin DMD projection engines for simultaneous or alternating MWIR/LWIR scene generation. Each operates in a 1400×1050 format with >650 K apparent temperature, user-selectable field of view, and frame rates up to 1 kHz for synchronized multispectral testing.

COMPACT, RUGGED DESIGN
Laboratory, hangar, and flight-line.

HIGH FRAME RATE PERFORMANCE
Frame rates up to 1,000 Hz for time-synchronized, high-speed dual-band testing.

Spectral Bands	MWIR (3–5 µm) and LWIR (8–12 µm)
Resolution Format	1400 × 1050 pixels per band
Frame Rate	Up to 1,000 Hz (synchronized operation)
Apparent Temperature Range	>650 K
Field of View (FOV)	User-selectable with interchangeable collimators
Optical Architecture	Dual DMD projection engines with co-registered optics
Cooling Requirements	None (solid-state optical design)
Illumination Type	Broadband IR source optimized for MWIR/LWIR uniformity
Operating Environment	Lab, hangar, or flight-line HWIL simulation setups
Integration Compatibility	Directly supports synchronized operation with MAPS base system and TEEA modules

www.valkyrie.com
Contact Us:
michael.mohawk@valkyrie.com
@Valkyrie2007
@ValkyrieEnterprisesInc