

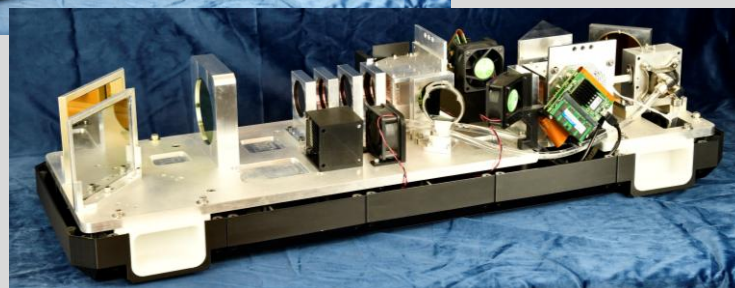
Flickerless, DMD-based Infrared Scene Projector

APPLICATIONS

- ☐ High frame rate, flickerless, high apparent temperature HITL testing
- ☐ HSV interceptor training and test
- ☐ ICBM warning sensor test

Product Details

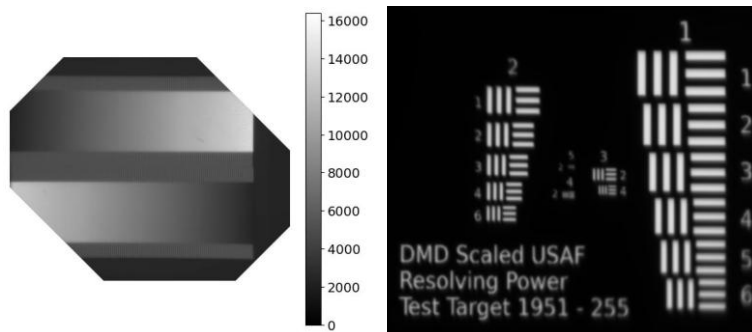
- ☐ Frame Rates up to 22.7 kHz
- ☐ Apparent temperature up to 1800 K
- ☐ 16-bit radiance resolution
- ☐ 768×1024 format
- ☐ Persistent, instantaneous, flickerless projection
- ☐ Does not require NUC
- ☐ Real time playback from on-board FPGA
- ☐ User interface enables image sequence upload and playback parameter control, including apparent temperature, framerate, option for high contrast mode.



Key Performance Parameters

Parameter	Value
System Overview	
Emission Band	3-5 μm
Format	768×1024
Radiance Resolution	16-bit analog projection
Maximum Contrast	4000:1 (global)
Maximum Frame Rate	22.7 kHz
Array Specifications	
Micromirror Operability	100%
Pixel Pitch	13.7 μm
Maximum Apparent Temperature	1000 K (global); 1800 K (QCL)
Rise Time	4 μs
Electronics Specifications	
DMD Clock Speed	400 MHz
Data Interface	DMD RAM
PC Interface (IO)	USB
NUC Computation	Not required
Synchronization	Not required
Packaging Specifications	
Case Dimensions	15×17×14.5 inches
Case Weight	45 lb

Projected Flickerless Images



Customizable Options

Spectral Bands	Illumination	Format
☐ 3-5 μm	☐ Global, $T_{\text{apparent}} > 1000\text{K}$	☐ 768×1024
☐ 8-12 μm	☐ QCL, $T_{\text{apparent}} > 1800\text{ K}$	☐ 2000×2208
☐ Ultraviolet (future option)		☐ 3500×3500 with steerable ROI
☐ Dual-band (future option)		