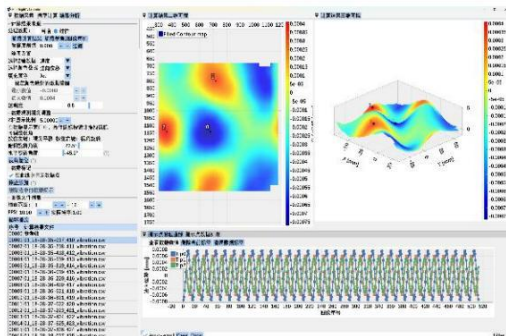


Image-Based Vibration Modal Measurement System

Overview

The EMODE-1 Image Vibration Modal Measurement System by Goptica's is a full-field vibration modal testing device based on image technology that achieves interference-level precision. By integrating Digital Image Correlation (DIC), a real-time down-sampling algorithm, and Goptica's proprietary high-speed stroboscopic synchronization and vibration-mode noise decoupling technologies, EMODE-1 delivers fast, stable, and high-precision full-field vibration and operating-deflection measurements - all while maintaining uncompromised spatial resolution.



The EMODE-1 system can cover an approximately 160mm×160mm field of view at a 0.5-meter measurement distance, achieving sub-nanometer-level out-of-plane displacement resolution and a maximum spatial resolution of 2000×2000 pixels, catering to both large field-of-view and micro-displacement measurement requirements.

Image-Based Vibration Modal Measurement System

Features

Features	Standard Configuration	Custom Configuration
Image Pixel Resolution	up to 2000×2000	Customizable
Image measurement resolution	up to 80 μm	
Measurement frequency range	1~10kHz	Customizable
Working Distance	500mm	Customizable
Field of View	160mm×160mm	Customizable
Output physical quantity	Displacement, velocity, acceleration (select through software)	
Frequency measurement range	1~10kHz	Customizable
Measurement Resolution	Field Displacement Resolution Better Than 10nm	
Signal Source Mode	Output 1~10kHz sine wave signal	
External input guide mode	Supports 1~10kHz vibration signal input (Connectable to single-point laser Doppler vibrometer, accelerometer, etc.)	Customizable
Control Method	Software Control	Customizable
Output data format	csv, the software can directly display the vibration mode of the selected area	
Unit mounting screw holes	1/4"	
Software	Windows system software, display, store, analyze measurement modal	
Overall dimensions	365mm (L) x 170mm (W) x 120mm (H) (excluding high-speed flash source)	
Power Supply	110V-240V, 50Hz-60Hz	
Warranty Period	1 year	Optional 2 years