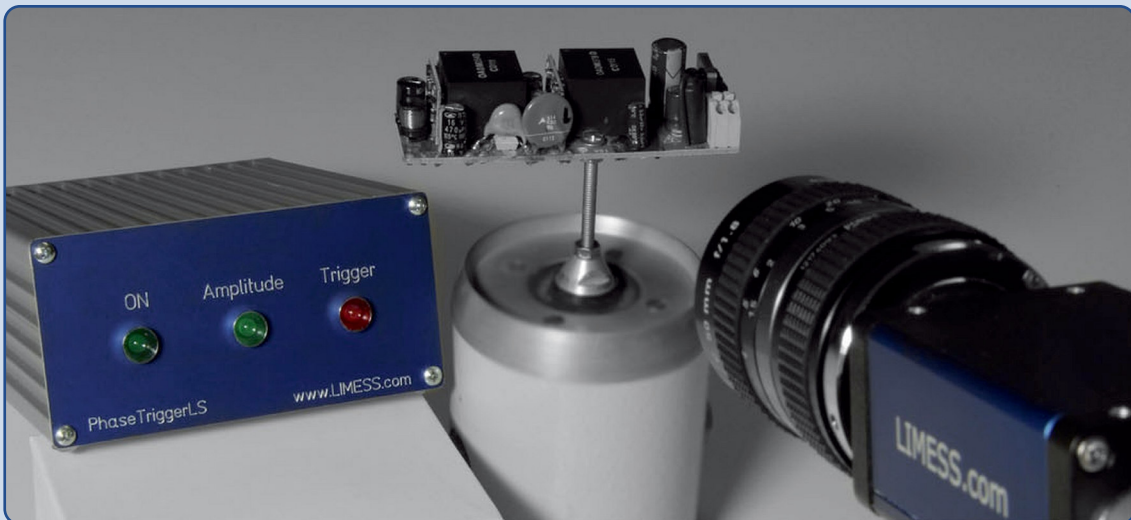


Strobe-CAM

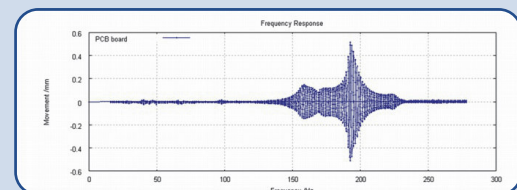
High Speed Events in Slow Motion • Visual Vibration Analysis

The Strobe-CAM allows the slow motion visualization of fast periodic movements like vibrations, rotations for example on a shaker, on the engine test bench, on inaccessible places or on miniature objects. The Strobe-CAM is a uncomplicated and inexpensive alternative to high-speed cameras and offers a wide range of possibilities which goes far beyond the visual observation using stroboscope illumination.



Applications

- Vibration test and vibration analysis
- Visualization, recording and documentation of component movements
- Automatic measurement of frequency response curve
- Determination of the resonance frequency
- Non-contact inspection
- Environmental test / Transportatiin test
- Cyclic test / Rotating objects



Benefits

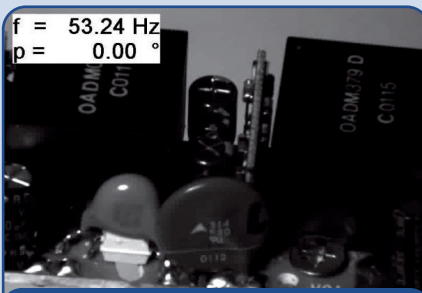
- Low cost alternative to Highspeed cameras
- Constant illumination (no stroboscopic lamp)
- Integrated recording of videos and documentation
- 100% compatible to shakers of B&K, LDS, Tira, etc.
- High camera resolution is possible
- Events in slow motion
- Process monitoring

Functional principle:

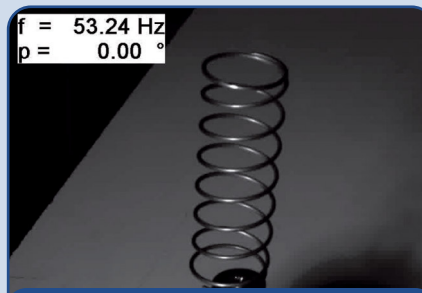
The Strobe-CAM controls precisely the cameras exposure moment relative to the periodic process. A constant LED illumination is used. The object movement gets frozen due to the short exposure time which is comparable to the illumination duration of a strobe light. The stroboscopic camera synchronization is done by a microprocessor controlled trigger module (PhaseTriggerLS) and is based on the realtime analysis of an input signal. The origin of the input signals can be a frequency generator, shaker, microphone or an acceleration sensor.

Expansion modules:

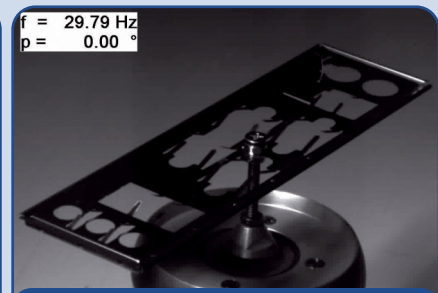
- With an optional real time image analysis module Resonance curves and Resonance frequencies can be determined.
- In combination with our digital image correlation technique DIC the 3D displacements and Mode-Shapes are measured fullfield.



Vibration on a PCB Board



Movement of a spring



Deformation of a panel

Technical Specifications

Suitable for	Periodic Events, Vibrations, Rotations
Frequency	0,01 Hz to 50 kHz
Trigger Signal Input	Analogue or TTL
Camera resolution	0.3 to 29.0 MPixel, Color or monochrome
Lens adapter for	Zoom lense, Macro lens, Endoscope
Compatible to shakers of	B&K, LDS, Tira, etc.
Computer	Laptop or Desktop PC
Field of view	1mm ² to 1m ²