

Press Release

Date: 17.05.22
Enclosure: Jpg
Reference: PR-0021-FLA-100522-SHAK

Polytec expands modal test solution portfolio with innovative Qsources mini shakers for structural excitation

With its PSV scanning vibrometer product family and PolyWave modal analysis software, the specialist for optical vibration measurement offers proven and powerful complete solutions for experimental modal testing. Now Polytec extends its range of development tools with the innovative Qsources high-frequency shakers for efficient structural excitation.

The Qsources Qlws LightWeightShaker excites structures consistently up to 13,000 Hz with a minimal footprint. Although the shaker is permanently attached to the structure, thus requiring no support structure, it effectively contributes only 1.8 g to the mass. In addition, the Qsources shaker has only minimal effect on the stiffness and thus fits into the measurement chain of the reactionless laser Doppler vibrometer. The inertial mass is dynamically decoupled from the stinger by a patented internal suspension. The generated force is given by the stinger and is thus perpendicular to the surface. For transfer function measurements a single-axis IEPE force sensor is integrated into the inertial mass.

The innovative shaker concept not only suits experimental modal analysis tests for FE model correlation, but also dynamic substructuring, which is increasingly in focus, as well as acoustic optimization. The design of the Qlws LightWeightShaker allows it to be used in all directions. Using multiple shakers driven by uncorrelated signals synchronously allows for the excitation of all modes in an experimental modal test. Using the triaxial scanning vibrometer PSV QTec 3D, transfer functions of such multiple-input multiple-output (MIMO) tests are assigned to the individual shakers using principal component analysis (PMA).

Polytec will take over sales and application consulting for the Qsources Qlws shakers and the dedicated Qma amplifier via its worldwide sales network with immediate effect.

Weblink: <https://www.polytec.com/eu/vibrometry/products/accessories/qlws-lightweightshaker>

Publication free of charge

For questions please contact
Christina Petzhold
[Tel. +49 \(0\)7243-604-3680](tel:+49072436043680)

Press Release

Date: 17.05.22

Enclosure: Jpg

Reference: PR-0021-FLA-100522-SHAK



The Qlws LightWeightShaker is self-supporting and can be attached in any direction to the device under test for consistent vibration excitation in experimental modal tests.

Publication free of charge

For questions please contact
Christina Petzhold
Tel. +49 (0)7243-604-3680