

aPLI/Flex-PLI Dynamic Calibration System DCS-PLI

- Suitable to aPLI and Flex-PLI;
- According to NCAP and ECE R127;
- Support aPLI Knee and Femur Inverse Impact Calibration;
- Support Flex-PLI Inverse Impact and Pendulum Test;
- Hanger Release time $\leq 10\text{ms}$;
- Max. Impact Speed 12m/s ;
- Speed Control Error $\leq \pm 0.1\text{m/s}$;
- Speed Feedback Measurement Sensor (Error $\leq \pm 0.05\text{m/s}$);
- Hanger Position Shift Very Easy and Adjustable;
- Certification Report is Generated Automatically.



The Dynamic Calibration System is designed for aPLI and Flex-PLI according to the requirements of NCAP and ECE R127. The system is modular in design, and the modules for the leg suspension can be quickly adjusted in height to accommodate shock calibration for aPLI and Flex-PLI. The suspension module has a height adjustment function to accommodate the dimensional tolerances. It adopts high-precision linear servo drive trolley, and the impact speed of the trolley is accurate and stable. The module for Flex-PLI pendulum calibration is driven by a servo motor and automatically lifts to a specified angle. It is automatically controlled by software, and the calibration report is automatically generated with customized report template as required.

Specification (Temperature $20^{\circ}\text{C} \pm 2^{\circ}\text{C}$, Humidity $30\% \sim 75\%$):

Name	Required	Value
Dimension (L×W×H) / mm ³	/	3900*963*2400
Weight / kg	/	1500
Power Voltage / VAC	/	380
Power / kW	/	16
Impact Speed / m/s	11.1	≤ 12
Impact Speed Error / m/s	$\leq \pm 0.2$	$\leq \pm 0.1$
Moving Ram Weight / kg	8.15	8.15
Ram Weight Error / kg	$\leq \pm 0.1$	$\leq \pm 0.1$
Ram Moving Friction / N	≤ 100	≤ 30
Free Distance Pre-impact / mm	/	≥ 70
Free Distance Post-impact / mm	/	≥ 190
Hanger Release Time / ms	≤ 10	≤ 10
Honeycomb (L×W) / mm ²	200*160	200*160
Pendulum Additional Mass / kg	5	5
Additional Mass Error / kg	$\leq \pm 0.05$	$\leq \pm 0.05$
Pendulum Suspension Angle / °	15	15
Suspension Angle Error / °	$\leq \pm 1$	$\leq \pm 1$

aPLI Inverse Impact Calibration Picture:



Calibration Data Analysis Software:

- ISO MME Data Import;
- T0 Adjustable and CFC Filter Support;
- Result Display and Report Generation.

