

Accelerometer Calibration System SCS-ACS

- Back-to-Back Calibration Installing;
- According to ISO16063-22;
- Support PR, IEPE, DIR Sensor Types;
- Measure Offset, Bias Voltage, Bridge Resistance;
- Calibration Range 30g~2000g;
- Shock Pulse Width 0.2ms~5ms;
- Transverse Moving≤5%;
- Sampling Frequency 1000kHz, 20bit A/D;
- Support Continues Shock by Compressed Air;
- Max. Payload≥50g;
- Expanded Uncertainty (k=2): 1.8%.

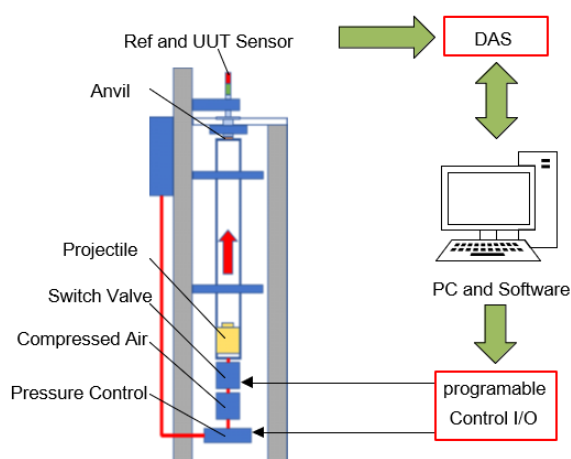


The accelerometer shock calibration system SCS-ACS adopts the principle of piston pneumatic shock to generate physical acceleration, and is designed with reference to the ISO16063-22 standard. Under the automatic control of the software, by controlling the shock pressure and the valve switch, the half-sine acceleration peak value of 30g~2000g is obtained. Endevco 2270, as the reference standard acceleration sensor, has long term stability with high resonant frequency. The system is automatically controlled by software, the calibration report is automatically generated, and the report template can be customized according to requirements.

Technical Specification (22°C±2°C, 30%RH~75%RH):

Name	Unit	Value
Calibration Range	g	30~2000
Shock Pulse	ms	5.0~0.2
Payload	grams	≥50
Calibration Result	Sensitivity, Non-Linearity, Offset, Bias Voltage...	
PR Excitation	V	5 or 10
PR Signal	mV	±1000
IEPE Current	mA	4
IEPE Max. Voltage	V	21
IEPE Signal	V	±10
DIR Signal	V	±10
Aided Power Output	V	24, ±12
Power	VAC	100~250
Compressed Air	bar	≥5
Standard Accelerometer	Endevco 2270 Response(-3dB) 2Hz~20kHz Sensitivity error≤0.1% per 1000g Transverse sensitivity≤3%	

System Diagram:



Procedure:

1. Mounting the Unit of Under Test (UUT) and Connecting with the correct channel of DAS;
2. Setup sensor information, Excitation, Calibration Range, etc. and Warm up;
3. Click Run by Software, and wait until all shocks had been done and report generated;
4. Remove UUT for the Next one or Shunt down.