

# SHOCK TOWER

# HDST series

## High Speed Shock Testing System

### HDST-150, 230, 300

HDST is the best option in Shock Machine's to ensure products such as smartphones, tablets, computers and other mobile devices are able to withstand shock. By applying high acceleration to computer parts, smart phones, tablets, laptops, cellular phones, and various mobile products to conduct product fragility test.

#### Features

- Specialized for High Acceleration up to  $294000\text{m/s}^2$  (30000G)\*
- High Reproducibility
- Easy Maintenance for Long Term Durability
- Easy-to-Use Test Settings by the Simple Construction
- Set-up by Double-Layered Shock Absorber

\* with Dual Mass Shock Amplifiers HGP (Option)

#### Compliance Standard

- JEDEC (JESD22-B111)
- JEITA (ET-7409/106)
- MIL-STD-810F
- JIS C 60068-2-27
- IEC 60068-2-27-87

#### Specification

Model	HDST-150	HDST-230	HDST-230HS	HDST-300
Table size (mm)	150 × 160	230 × 230	230 × 230	300 × 300
Specimen max weight (kg)	1	10	5	20
Shock pulse	Half-sine			
Acceleration range ( $\text{m/s}^2$ )	14700 (1500G)	29400 (3000G)	49000 (5000G)	29400 (3000G)
Pulse duration range (ms)	0.5 / 1.0	0.5 / 1.0 / 2.0		
Seismic base	Pneumatic springs and hydraulic damper device			
Brake mechanism	Pneumatic-hydraulic friction brake system			
Controller	Manual & auto cycle control			
Size (W × D × H mm)	1000 × 800 × 2330	1000 × 600 × 2675	1000 × 600 × 3970	1100 × 640 × 2700
Capacity (kg)	600	1200	1400	1500
Controller Size (W × D × H mm)	520 × 400 × 950	520 × 400 × 950	520 × 400 × 950	520 × 400 × 950
Power supply	200V-10A			

\* (Available for customization) The above are standard specifications. Please contact us if you have any request to customize.



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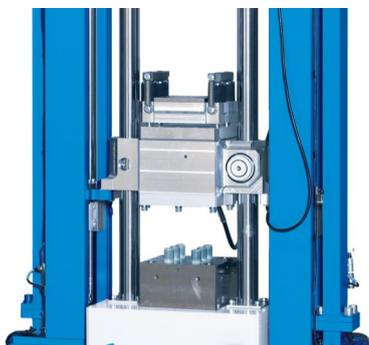


HDST-230

# Options for HDST series

## Dual Mass Shock Amplifiers HGP series

for generating extremely high acceleration levels.



HGP-150

HDST-230 with HGP-150

### Combination with shock testing system

Designed to be paired with shock testing systems, especially with HDST-series, for generating up to  $294000\text{m/s}^2$  (30000G). Depending on desired acceleration, it can also be applied to other testing systems.

### Well controlled test

With its simple construction, it can be easily affixed on the shock table of the shock tester to carry out tests. The acceleration is well controlled.

### Specification (Standard model)

Model	HGP-20	HGP-150
Test sample table size	W170 × D160	W150 × D150
Test sample max. weight	3	5
Shock acceleration range ( $\text{m/s}^2$ )*	2000 ~ 50000 (200 ~ 5000G)	90000 ~ 460000 (9000 ~ 50000G)
Pulse duration range (ms)	0.2 ~ 1	0.08 ~ 0.2

\* Customized model available

### Example usage of the HGP-150

Specimen: Module for Mobile Phone

Acceleration & Duration:



①  $147000\text{ m/s}^2$  (15000G)  
@0.15ms



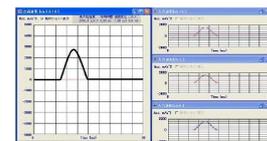
②  $294000\text{ m/s}^2$  (30000G)  
@0.07ms

## Shock Manager SM-500

It can contribute to the measurement and analysis of shock test. It is able to incorporate a max of 10 channels of accelerometers\* and assist in monitoring its test result. With useful functions like SR and SRS analysis, it can analyze various specimens.



- User-Friendly Operation
- Multi analyzing functions



\*10 channels for only the piezoelectric or build-in amplifier type  
5 channels each for the piezoelectric and build-in amplifier type (Total 10 channels)

### Safety Installations

The test should be carried out not only correctly, but also safely. These installations contribute in assuring its safety.

- Safety Fence (soundproofing)

To lower external noise levels and prevents injuries during tests. It covers the whole tester. When the door is closed, those risks would be reduced.



Safety Fence

- Signal Light

Its color changes corresponding to the action at that point of time. These changes can announce the situation of tester to whoever is around the tester.

- Safety Mat Switch

This mat surrounds the tester and stops the movement when anything is on it. Its size and quantity can be arranged as per required.

- Photoelectric Sensor

It detects anything that cuts off its photoelectric range. These sensors need minimal space to install and keeps high sensitivity.

\*Available to apply either requirement.