

Dongling <|> Electro-Dynamic Vibration Shaker
Model: ES-20-320 GT500

Parameter	Value
Impulse waveform	Sine, Random, Sine Over Random, Sine Over Random Over Random, Resonance tracking, Classic Shock, Replication
Test direction	Longitudinal, Transverse, Vertical
Sine force (kN)	20
Random force (kN)	20
Shock force (kN)	40
Armature mass (kg)	20
Head expander mass for Z-axis (kg)	23 (additional)
Slip table mass for X,Y-axis (kg)	27.5 (additional)
Frequency range (Hz)	5 to 2000
Maximum acceleration (m/s ²)	981
Maximum displacement (mm)	50
Maximum velocity (m/s)	2
Head expander dimension (mm)	500x500 (applies for vertical operation)
Slip table dimension (mm)	500x500 (applies for horizontal operation)
Laboratory condition	General
Temperature (°C)	23 ±5
Relative humidity (%)	10 to 60

Testing can be performed according to standards	Condition
IEC 60068-2-64:2008	Vibration, broadband random
EN 60068-2-64:2008	Vibration, broadband random
SIST EN 60068-2-64:2008	Vibration, broadband random
IEC 60068-2-6:2007	Vibration (sinusoidal)
EN 60068-2-6:2008	Vibration (sinusoidal)
SIST EN 60068-2-6:2008	Vibration (sinusoidal)
MIL-STD-202C	Method 213B (shock)
IEC 60068-2-27:2008	Shock
EN 60068-2-27:2009	Shock
SIST EN 60068-2-27:2009	Shock

Calibration - sinus

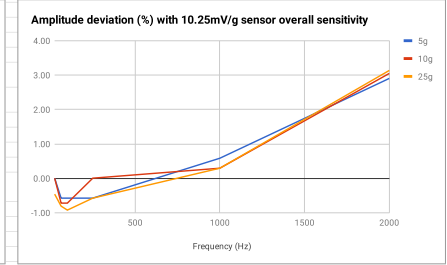
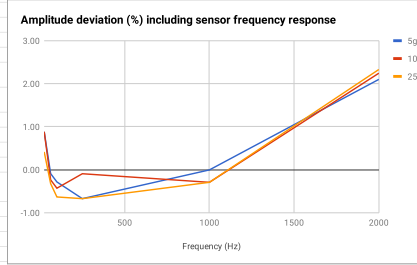
Frequency (Hz)	Acceleration amplitude ACrms				Acelerometer 55125 (mV/g)				Acceleration amplitude ACrms deviation (%)				Acceleration amplitude ACrms deviation (%)			
	5g	10g	25g	10.25	5g	10g	25g	10.34	5g	10g	25g	5	10	25	5	10
25	3.45	6.90	17.17	25	5.04	10.09	25.10	10.34	25	0.88	0.88	0.42	25	0.01	0.01	-0.46
63	3.43	6.85	17.11	63	5.00	9.98	24.92	10.3	63	-0.09	-0.24	-0.32	63	-0.57	-0.72	-0.81
100	3.43	6.85	17.09	100	4.99	9.96	24.84	10.28	100	-0.28	-0.43	-0.63	100	-0.57	-0.72	-0.92
250	3.43	6.80	17.15	250	4.97	9.89	24.83	10.24	250	-0.67	-0.98	-0.67	250	-0.57	0.01	-0.57
1000	3.47	6.92	17.30	1000	5.00	9.97	24.93	10.19	1000	0.00	-0.29	-0.29	1000	0.58	0.30	0.30
2000	3.55	7.11	17.79	2000	5.11	10.22	25.58	10.17	2000	2.10	2.24	2.33	2000	2.90	3.05	3.14

Postopek:

Uporabi kalibrirane senzorje
 Zapiši, kateri senzor je bil na shakerju = 55125, 10.25mV/g
 En senzor daš na shaker, en senzor daš na Sirius Acc

V DEWESoftu meriš prave vrednosti

Na shakerju nastavi 10.0mV/g, preračuni sledijo pozneje
 Pri nastavitvi 12mV/g = 4.12 @ 25Hz 5g



Freq. (Hz)	Displacement (mm peak)
2	93
3	41
4	23
5	15
7	7
10	4
15	2
20	1

