

SPACE ELECTRONICS, INC - GIMBAL BALANCE INSTRUMENTS SPECIFICATION SHEET

The GM900 series machines manufactured by Space Electronics are designed specifically for gimbal balance. These computer controlled machines determine the 3-axis unbalance of gimballed guidance seekers and other gimballed devices and, if optional custom software is purchased, inform the operator the location and amount of ballast needed to achieve balance.

Once mounted, the gimbal is rotated about its own axes to four test positions without refixturing. The basic systems described below require that the operator manually rotate and lock the gimbal in these four positions. However, we offer a variety of options which allow electrical positioning by the system computer. Measurements at the four test positions are used to automatically calculate the unbalance about both gimbal axes.

MODEL	PAYLOAD CAPACITY (LB)	MAXIMUM GIMBAL SIZE LxWxH (inch)	Mounting Plate Size (in)	Machine Sensitivity (g-cm)
GM901	50	25x25x25	10 x 10	10.1
GM904	50	25x25x25	19.5 x 17.5	0.5*
GM904A	250	25x25x25	19.5 x 17.5	1.0
GM904S	20	25x25x25	19.5 x 17.5	0.1*

* Option SE9713 may affect machine sensitivity

OPTIONS	DESCRIPTION
SE9713	25 Conductor Flex Strip to power Gimbal
SE9714	Digital Interface (angle drive-read option)
SE9715	Analog Interface (angle drive-read option)
SE9716	Computer Desk
SE9769	*Double Riser Shroud (provides added height)
SE9785	Gimbal Simulator
SE9827	Rotary Table (converts instrument to make CG Measurements)
SE9928	Shroud Interlock (insures shroud is closed for measurement)
SE9946	Spare Parts Kit for GM904S
////////	Custom Weight Correction Software

Model GM901 torsion rods on each axis combined with LVDT displacement sensors.

Model GM904 resistance to moment overload. The gimbal is mounted on top of a test plate using a custom fixture; a fixed lower counterweight corrects nominal CG height.

Model GM904S twice that of the GM904

Model GM904A similar to the GM904, but a heavy adjustable counterbalance is used.

	L (in)	W (in)	H1 (in)	H2 (in)	H3 (in)	Shipping Wt. (typ.) (lb.)
GM901	54	38	39	56	80	1100
GM904 (all models)	54	38	42	59	83	1300