

NORTHROP GRUMMAN

Space Technology

Astro Aerospace

40-LB LINEAR ACTUATOR BI-STEM™



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Description:

The 40-lb Linear Actuator BI-STEM™ boom is a 1.34-inch-diameter boom that can be used as a gravity gradient boom, antenna, instrument actuator, camera support, or as an actuator for deploying other structures such as masts, solar arrays, or antennas.

Hundreds of Astro's STEM™ and BI-STEM™ booms have flown on spacecraft since 1962 with a 100% mission success rate. This design was qualified on the ISIS program for flight on STS.

Item Description	Performance
Total Weight	11.1 lb
BI-STEM™ Boom Weight	0.0158 lb/in
Length	22 ft (custom lengths available)
EI	222,000 in ² -lb (Stainless Steel)
Bending strength	2,612 in-lb
Stowed length	10.87 in
Stowed width	5.65 in
Stowed depth	5.30 in
Boom diameter	1.34 in
Deployment voltage	28 Vdc
Deploy current	0.33 A
Time to deploy	3 min. for 22-ft boom
Maximum Deployment Force	40 lb



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