

This ultra-precise, lightweight, 6-DOF robotic arm incorporates SPS patented Zero-Net Momentum Actuator (ZNMA) technology at each joint, such that the motion of the arm is completely decoupled from the bus.



Designed to reduce development time, reduce technical interface complexity, improve modularity for ISAM and in-space servicing platforms.

ZNMA ROBOT ARM

ROBOTIC MANIPULATION WITH NO IMPACT ON THE BUS.

APPLICATIONS Docking, In-Space Manufacturing, Satellite Servicing, Refueling, De-Orbit	HOLDING POSITION ACCURACY 0.01° per Joint	ARM PAYLOAD CAPACITY No Design Limit (Subject to Mission Requirements)
ARM PAYLOAD SPEED No Design Limit (Subject to Mission Requirements)	VOLTAGE 24-60V	OPERATIONAL TEMPERATURE -200 °C- 180 °C (Optional inclusion of heaters)
LIFETIME MTTF analysis of 10 years	DESIGN • Low SWaP-C Design • HDRM(s) for launch lock • Built-In Control PCBs • Flexible interfaces	DEVELOPMENT SCHEDULE • Rapid custom development: • PDR at ATP + 4 weeks • Delivery ATP + 8 months