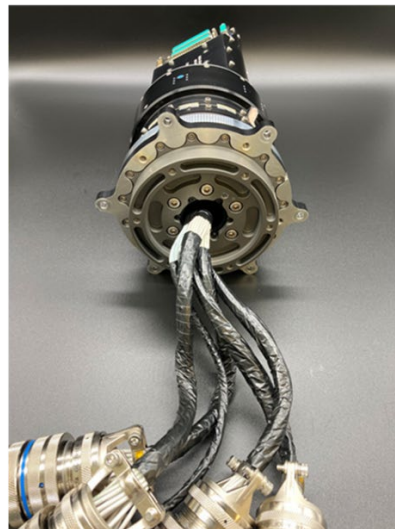
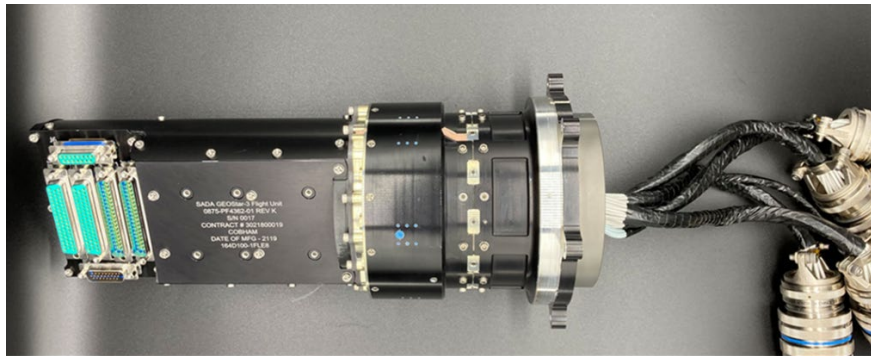


Standard Solar Array Drive Assembly (SADA-150)

- In-Line Design with High Torque Output.
- High-Efficiency Slip Ring Design.
- Flight-Proven Design with 100% Successful Performance Heritage.
- Compact Hybrid Stepper Motor and Harmonic Drive.
- Dual Potentiometers for Position Sensing.
- Small Angle Permanent Magnet Stepper Provides High Holding and Running torque.
- Zero Backlash and High Output Flange Stiffness.
- Flexible Modular Slip Ring Design Can Accommodate Various Power Levels at Up to 120 Volts.
- Optimized for Low Power Consumption.
- Twist Capsule and Limited Output Shaft Rotation Available as Options.



Standard Solar Array Drive Assembly (SADA-150)

Parameters	Units	Basis	Values
Size Unit Body excluding rotor harness (LxWxH)	Inches	Maximum	13.25 x 6.4 x 6.4
Total SADA Maximum Mass (Including all cables and connectors)	lb	Typical	15
	kg		6.8
Output Step Angle	Degree	Standard	0.0075
Steps/Revolution		Standard	48000
Harmonic Drive Ratio		Standard	200:1
Motor Step Angle	Degrees	Standard	1.5
Max Output Step Rate	Step/Sec (Deg/Sec)	Maximum	150 (1.125)
Torsional Stiffness	in-lb/rad	Typical	150,000
	Nm/rad		16,950
Axial Load	lb	Maximum	1500
	Nm		6672
Transverse Load Capability	lb	Maximum	1100
	Nm		4893
Moment Load Capability	in-lb	Maximum	1300
	Nm		147
Power	Watts	Typical	14.1
Inertial Capability	Kg-m ²	Typical	50
Output Torque	in-lb	Typical	354 lb-in @ 0.6 deg/sec @ 22 VDC
	Nm		40 Nm @ 0.6 deg/sec @ 22 VDC
Holding Torque Powered	in-lb	Typical	500
	Nm		56.5
Holding Torque UnPowered	in-lb	Typical	150
	Nm		16.9
Thermal Limits			
Acceptance (External Environment)	Hot (°C)	Maximum	+85° -0°/+5°
	Cold (°C)		-30° -4°/+0°