MOOG | SPACE | SPACECRAFT MECHANISMS

SMALL SATELLITE SOLAR ARRAY DRIVE ASSEMBLY (SADA)



The small satellite Solar Array Drive Assembly (SADA) is a lightweight and compact power solution for positioning solar array panels. Continuous rotation of the solar array is facilitated by the integration of a slip ring assembly. Position telemetry is made available using Moog's noncontact position sensor technology. The SADA is comprised of modular components, allowing modifications to meet mission specific requirements. The drive axis

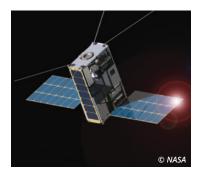
is comprised of a stepper motor and a gear transmission accommodating an open-loop command and control scheme.

KEY FEATURES:

- LEO orbit capable
- Continuous rotation
- High stiffness of output
- Modular design





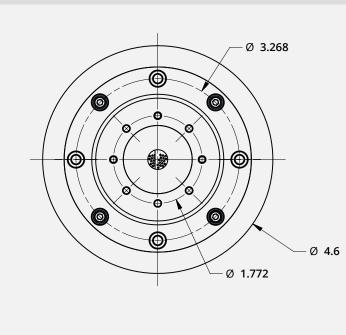




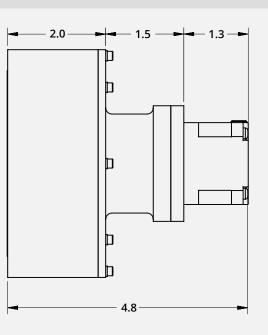
SMALL SATELLITE SOLAR ARRAY DRIVE ASSEMBLY (SADA)

SPECIFICATIONS

Features	Units
Unit Mass	3.25 lbm
Dimensions (L W H)	Ø4.6" x 4.8"
Operating Voltage	22 VDC
Current Draw	0.45 A
Output Torque	50 lbs-in
Power	10W
Output Step Size	0.018°
Operating Temperature	-40 to 65°C
Cycle Life	90,000 Revs of output
Slip Ring Compliment	30 rings (15 power circuits & 15 return circuits) @ 3.0 A/circuit



DIMENSIONS





21339 Nordhoff Street, Chatsworth, CA 91311 Scott Reynolds – sreynolds@moog.com Jeff Smith – jsmith8@moog.com www.moog.com/space







O

@MoogSDG



Equipment described herein falls under the jurisdiction of the EAR and may require US Government Authorization for export purposes. Diversion contrary to US law is prohibited. ©2023 Moog, Inc. All rights reserved. Product and company names listed are trademarks or trade names of their respective companies.