

Deployable Clamshell Solar Array (DCSA) Hardware Revision: C

220W Solar Array for Small Satellites

Applications

- Nanosatellites
- Pumpkin SUPERNOVA™ 6U/12U NanoSats
- Small satellites

Features

- Topology:
 - Contained in stowed position in two hinged clamshell halves
 - Dual N-panel configuration, 8S12P + 8S12P
- Electrical:
 - 2 x 110W = 220W max.
 - 2 independent sides
- SWaP (220W size):
 - Stowed: 439 x 116 x 136mm (6.97l)
 - Deployed: 878 x 116 x 1390mm
 - Mass: 5.1kg
- Features:
 - Utilizes 5th-generation PMDSAS solar panels
 - Entire array is captured within clamshell in stowed position; robust construction
 - Single customer-supplied release mechanism enables automatic deployment
 - Versatile mounting plate to attach to S/C structure; can be articulated on S/C



Figure 1: Deployed



Figure 2: Stowed

ORDERING INFORMATION

Pumpkin P/N 710-02902

Option Code	Configuration
/P00 (standard)	Standard

CAUTION



Electrostatic Sensitive Devices Handle with Care



© Pumpkin, Inc. 2003-2023

Deployable Clamshell Solar Array (DCSA)

Rev.	Date	Author	Comments
А	20170424	AEK	Initial release of hardware Rev C (144W version).
В	20230704	AEK	Updated to reflect dimensions and availability of 220W version.

TRADEMARKS

The following are Pumpkin trademarks. All other names are the property of their respective owners.

- Pumpkin[™]and the Pumpkin logo
- Salvo[™] and the Salvo logo
- MISC[™]
- SUPERNOVA™
- CubeSat Kit[™] and the CubeSat Kit logo

DISCLAIMER

PUMPKIN RESERVES THE RIGHT TO MAKE ANY CHANGES WITHOUT FURTHER NOTICE TO ANY PRODUCTS HEREIN TO CORRECT ERRORS AND IMPROVE RELIABILITY, FUNCTION, APPEARANCE OR DESIGN. PUMPKIN DOES NOT ASSUME ANY LIABILITY ARISING OUT OF THE APPLICATION OR USE OF ANY PRODUCT OR CIRCUIT DESCRIBED HEREIN; NEITHER DOES IT CONVEY ANY LICENSE UNDER ITS PATENT RIGHTS, NOR THE RIGHTS OF OTHERS.



INCORPORATED

744 Naples Street San Francisco, CA 94112 USA tel: (415) 584-6360 fax: (415) 585-7948

web: <u>http://www.pumpkininc.com/</u> email: <u>info@pumpkininc.com</u> web: <u>http://www.cubesatkit.com/</u> email: <u>info@cubesatkit.com</u>