

DSA/1A

DEPLOYABLE SOLAR ARRAY

for 1U CUBESATS

Performance:

Supply Voltage: 4.5V to 5.2V top side

3.2V to 3.3V bottom side

2A@20V Schotky diodes integrated

Power Delivered:

Condition full sunlight in LEO

1U Low cost solar cells: 3.75 W minimum

1U High power AzurSpace 3G-30: 12 W minimum

Cell Efficiency:

28% (High power) or 19% (low cost)

Release in 19 seconds using 152 joules

Deploy in 10 seconds using 52 joules

Operating Temperature: -80 to +130°C

Radiation Tolerance: 2 years minimum in LEO

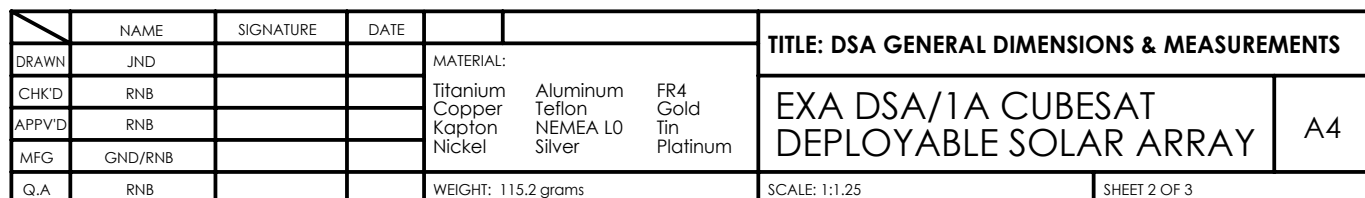
4 years minimum with NEMEA shielding

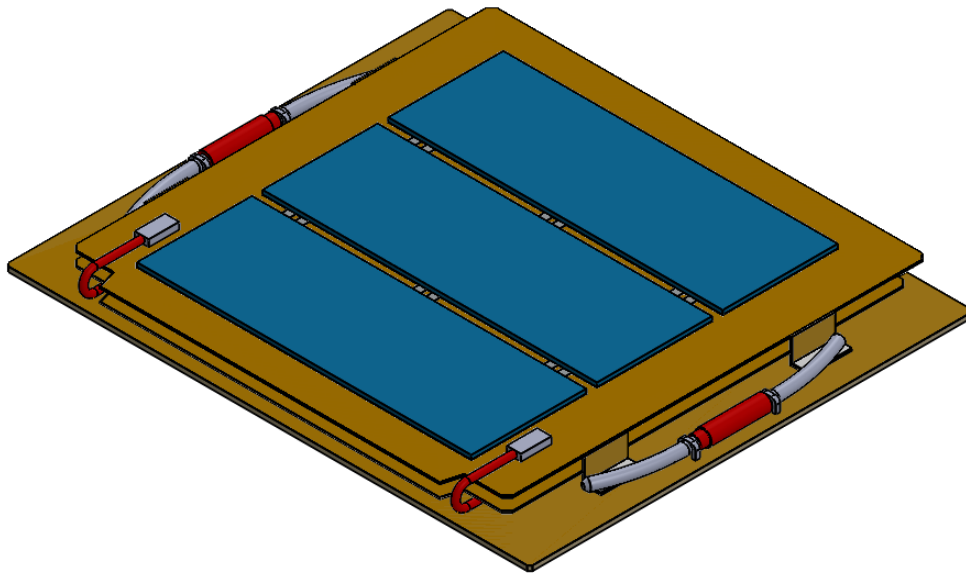
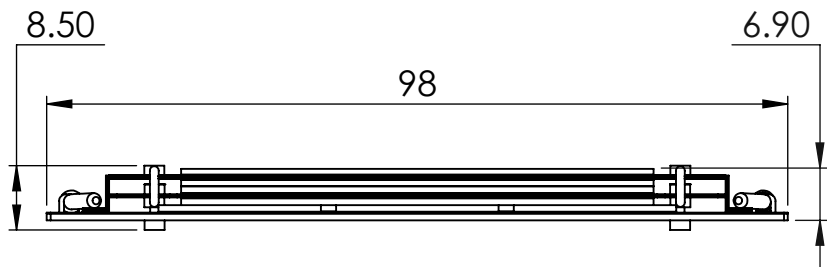
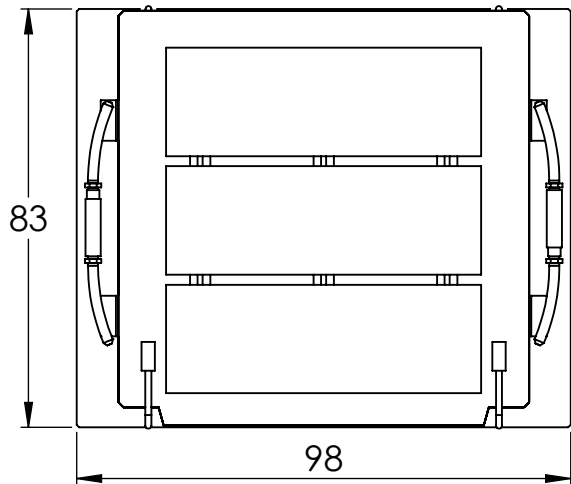
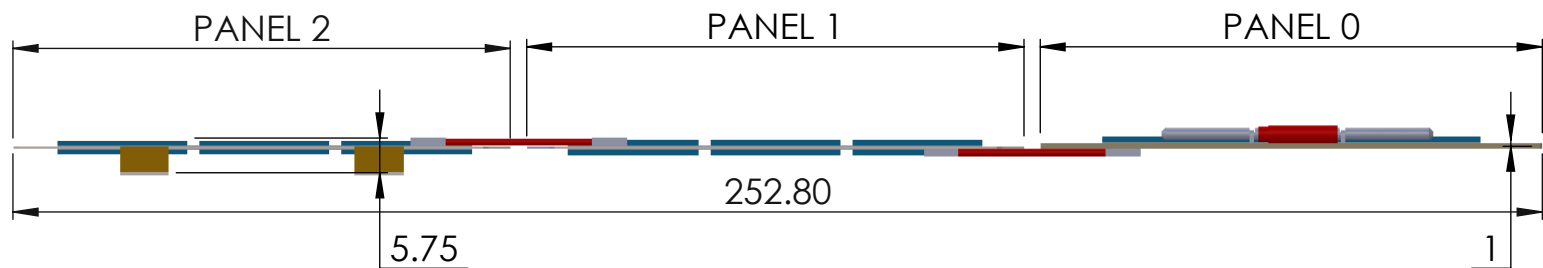
Interfaces:

Custom choice, normally 3 Molex PicoBlade inline 4 pin connector with gold plated contacts PTFE (Teflon) space grade cables, single strand, silver plated copper (AWG26, AWG24 and AWG30)

Check this video to see the release/deploy in action:

https://www.youtube.com/watch?v=zP_ONUQfIZs





	NAME	SIGNATURE	DATE			TITLE: FOLDED DSA & SIDE VIEWS DIMENSIONS & MEASUREMENTS			
DRAWN	JND			MATERIAL: Titanium Copper Kapton Nickel	Aluminum Teflon NEMEA L0 Silver	FR4 Gold Tin Platinum	EXA DSA/1A CUBESAT DEPLOYABLE SOLAR ARRAY		A4
CHK'D	RNB								
APPV'D	RNB								
MFG	GND/RNB								
Q.A	RNB			WEIGHT: 115.2 grams			SCALE: 1:1 1:1.125 1:1.5		SHEET 3 OF 3