

Solar Arrays

Key Benefits

- ⌋ Modular
- ⌋ Scalable
- ⌋ Compact
- ⌋ Low mass
- ⌋ Low cost
- ⌋ Retractable



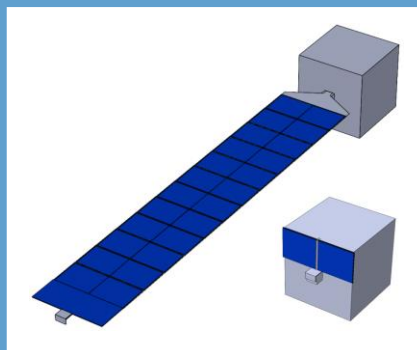
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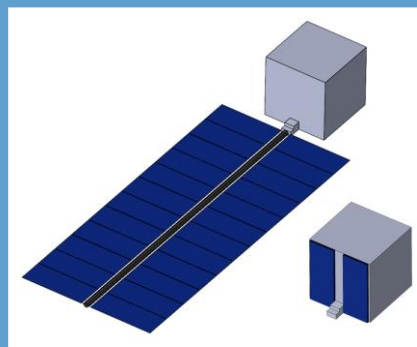
MOSSA

The Modular Self Stiffening Array (MOSSA) is Opterus' ESPA class SmallSat solar array offering for precision missions. It is a panel-based architecture that packages very thinly while expanding in thickness during deployment to maintain high vibration frequencies for agile missions. It can be configured with 3 to 9 modular panels. The package size and shape is similar to a large pizza box. Direct attachment and gimbaled versions are offered.



CCX-1

The Close Cross Section (CCX-1) array is a tensioned blanket array using a single blanket assembly (z-folded column/stack of panels). The array consists of thin z-folded panels and is deployed and tensioned by our closed cross-section CTM boom on the back-side of the array. CCX-1 allows a large number of panels to be stacked for high power, low-cost missions. Panel size is tailored for the bus size.



CCX-2

The CCX array readily expands to two blanket assemblies stowed parallel to each other and is enabled by our high torsional stiffness CTM booms. This configuration allows a blanket width approximately twice that of the CCX-1 array for twice the power. Blanket assemblies stack parallel to the bus wall to minimize stowed volume.



R-ROMA

The Retractable-Rollable Mast Array (R-ROMA) is a tensioned blanket array based on double z-folding panels. The array first expands z-folded arms to reveal up to eight blanket assemblies (strips). In a second step, the central Trussed-CTM column deploys to raise each blanket. Due to its double z-fold architecture and compatibility with all cell types, the R-ROMA array achieves the highest performance for both power density and total power. R-ROMA is also retractable making it ideal for solar electric propulsion missions.