hemeria

solar arrays

Developped with support of

cnes

HEMERIA designs and produces solar arrays systems for new generation of operational space systems, used for science, commercial and defence small satellites platform.

- Solar Array Product from Substrate, PVA, HDRM and Hinges Mecanisms
- From 30 to 1 KWatt
- Application for LEO, GEO, and Exploration.
- A reliable solution fully designed, qualified, manufactured in integrated internally.
- Fast delivery
- Fast repair process

8 years in orbit lifetime

heritage

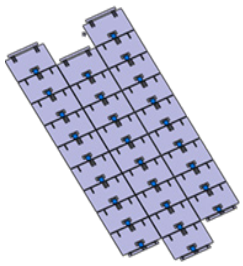
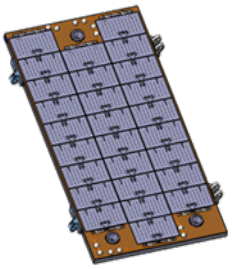
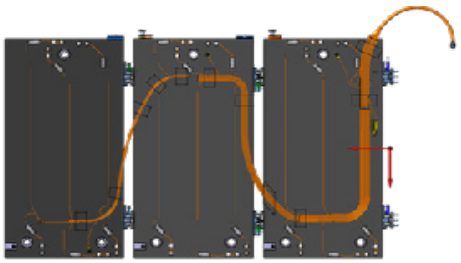
- 180 SOLAR ARRAYS FOR IOT CONSTELLATION OF 25 NANOSATELLITES KINEIS
- MARTIAN MOONS EXPLORATION ROVER SOLAR ARRAYS

solar arrays

general specifications

Number of panels	• 1-3 panels per wing
Range	• 30 to 1 KWatt • Highly scalable to customer power needs
Cells	• Azurspace AZUR 3G30A / Spectrolab XTE CIC
Lifetime	• Qualified for 8 years in LEO, Qualification for 3 years in GEO under progress
Electrical I/F	• Sub D connector or flying leads
Orbit	• LEO, GEO, MEO, Exploration
Lead Time	• Design / qualification (if required) : 2 to 3 months • Production and acceptance tests 6 to 9 months
Substrate	• CFRP skin with aluminum honeycomb panel
Mechanisms	• Fitting SADM (information on demand) • HEMERIA own development for mechanisms (HRM, Hinges) or accommodation to customer request
Repair	• Qualified repair processes
Stowed frequencies	• > 100Hz
Mass	• Mechanisms 0,5Kg for a wing of 3 panels • Panel + PVA : 3,4Kg/m²
Loads	• >15g quasi static design load • >15grms random vibration

smallsats solar array example

Substrate	PVA	Solar Array	Wing
			

martian moons exploration rover

- Fast track schedule development qualification and production in less the 1 year.
- High radiation level environment
- Flexibility to adapt to customer requirements => BTprint/BTspec.
- Adapted to customer deployment mechanisms

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space & sky

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