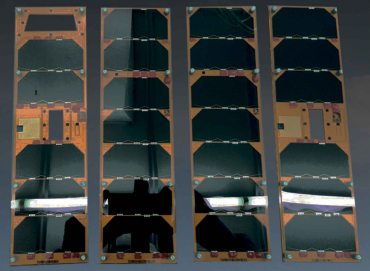
Solar Panels for Aerospace Applications

OVERVIEW

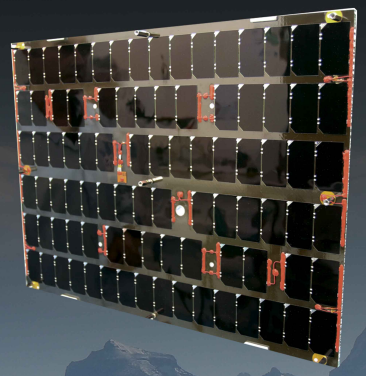
Cubesat compatible (1U, 2U, 3U, 6U, 12U, 16U).
Customized sizes in honeycomb substrates, polyimide, aluminum.
Manufactured according to ESA standard ECSS-E-20-08C.

FEATURES

Electronic components qualified for military or aerospace applications. Rad-Hard components.
Designed and manufactured with space-qualified materials offering customized solutions for your mission.
Solar cell assemblies with Triple Junction on Ge substrate (29-30% efficiency).
Covered Interconnected Cell (CIC) with integrated bypass diode and coverglass, aerospace qualified.
No wiring on panel. PCB substrate manufactured in conformance with ECSS-Q-ST.
Customized design solar panels according to customer needs and deployable solar panels.
Integrated sensors into PCB substrate, as magnetometers, temperature and sun sensors.
Testing capabilities: random, shock, acoustic, TVAC, thermal cycling, illumination, deployments.
Substrates: Polyimide, FR4, aluminum, honeycomb aluminum, carbon fiber.

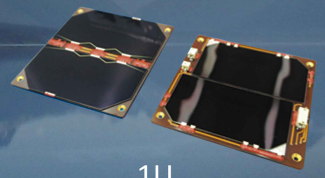


3U



Custom solar panels

Deployables



1U

Pocketqubesat

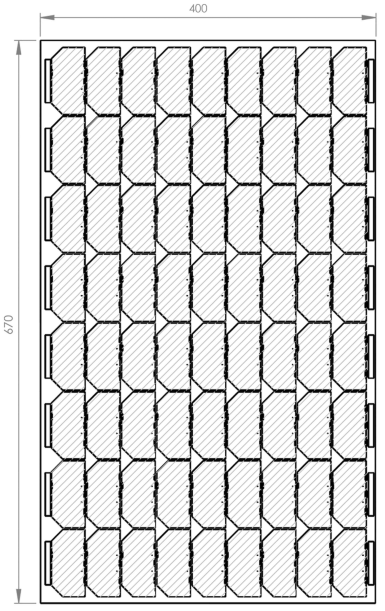
ISO 9001 ISO 14001 BUREAU VERITAS Certification
DHV Technology is a ISO 9001 and ISO 14001 certified company.

www.dhvtechnology.com
Parque Tecnológico de Andalucía, Av. Juan López Peñalver 21, 29590, Málaga, Spain
00 34 951 956 837 dhv@dhvtechnology.com

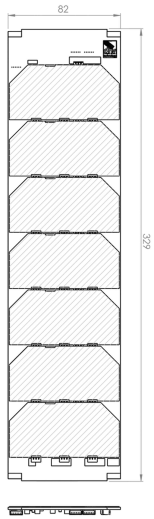
Design and Manufacturing Photovoltaic Assemblies for Space

	Pocketqubesat	1U	3U	Custom
Power (AMO WRC) 1367 W/m²; T = 28 °C	272 mW	2,42 W	8,48 W	From 1,21 W to (n) SCA`s
Part Number	SPC-PQ1P	SPC-CS10	SPC-CS30	SPC-CSP
Sensors	Magnetometer Temperature sensor	Magnetometer Temperature sensor Sun Sensor	Magnetometer Temperature sensor Sun Sensor	Magnetometer Temperature sensor Sun Sensor
Mass (1,6 mm PCB without sensors)	23 g	39 g	132 g	Please contact us!

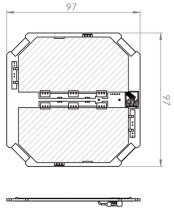
Please contact us for different or custom sizes for your solar panel. SCA is Solar Cell Assembly



Custom size



3U



1U

1P

DHV Technology has supplied UNISAT-6 mission with our panels. This mission was launched on June 2014 and we continue providing solar panels for the cubesat market in 2015. We have experience in manufacturing many standard formats, however, we are open to listen your project or mission requirements.
Our products are being tested at Certified Laboratories by ESA in order to offer the best results and performance.

The SCA series connection can reach voltages up to 16 V in a 3U size. The string can be placed either on honeycomb or PCB substrates using a space grade film adhesive with ultra low outgas properties. This adhesive is made of silicone free or highly viscosity components which ensures a strong bonding. The SCA string is connected to the EPS in the satellite using a 4-6 pins harness. Power and ground lines only use two pins and the rest of them may be used for magnetometers or temperature sensors. Solar Panels are supplied with a protective Kapton coverlay on the surface. The PCB substrates are made in conformance with ECSS-Q-ST-70-11C. Solar panels are manufactured following the standard ECSS-E-ST-20-08C.

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