



## Press Release 09/06/06

### Clyde Space Gets SMART with Off-the-Shelf CubeSat Power Management Solution

Clyde Space has won a SMART Scotland award; an innovation grant from the Scottish Executive, representing funding of £50k (GBP). The grant will be used to develop a high efficiency, plug-n-play power system and battery for CubeSats and miniature spacecraft. The resulting development will be produced using the 'CubeSat Kit' philosophy in order to keep the technology within the reach of typical educational establishments and other limited budget organisations.

The Clyde Space CubeSat power system offers a complete solution to organisations looking to build their own CubeSat and miniature spacecraft missions. The system works on the concept of being able to interface solar arrays of different characteristics (6 in total – one per side of the Cube) onto the same power bus. Another key feature of the system is the ability to maximise the power from the arrays using an integrated maximum power point tracker.



The CubeSat Kit (photo courtesy of Pumpkin, Inc)

The power system boasts an integrated 8.4V Lithium ion battery of at least 1.5Ah capacity.

In addition, there will be regulated 5V and 3.3V lines; a switched, over-current protected interface for other subsystems on the spacecraft and a standard digital serial interface for the purposes of telecommand and telemetry.

The power system is modular and scalable by stacking identical boards on top of one another, making the design ideal for 1U and 3U CubeSats.

Clyde Space are based in Glasgow, Scotland and offer off-the-shelf and tailored small satellite power subsystems with excellent heritage and our team has experience extensive industry experience having worked on over 25 small satellites. Clyde Space is Glasgow's

first indigenous space company and is proud to carry on the Scottish tradition of innovative, reliable engineering.

The 10x10x10cm, 1kg CubeSat standard has evolved to become the basis for one of the most widely accepted families of picosatellite designs and was originally proposed by Professor Bob Twiggs at Stanford University. The electrical and mechanical interfaces of the power system will be compatible with the Pumpkin, Inc's CubeSat Kit.

For more information on Clyde Space visit [www.clyde-space.com](http://www.clyde-space.com), or contact [enquiries@clyde-space.com](mailto:enquiries@clyde-space.com).

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