



## **New Miniature Intelligent Direct Drive Brushless Speed Dome Motor**

We talked earlier this year about a very small size, low cost, intelligent Speed Dome Direct Drive Brushless Motor. I am now pleased to say we are moving to prototype stage and the technology is ready now for incorporation into the latest wave of Intelligent Speed Dome Technology.

Here is the first prototype PTZ using the small 10:1 Sony and the new technology direct drive brushless motors. The big point of these is that they are intelligent with all the servo and positional electronics integral with the motor, so they only need power and a serial connection - at the moment this is i2c -so anyone with an encoder/codec only needs a housing and camera and two of these motors to have a PTZ - they will not need to have any additional electronics.

Specification wise the speed range from very slow indeed to 1.5 revs per second, basic accuracy much better than 0.1 degree, both motors work off the same i2c control pair, they are completely silent, and they will comfortably fit with the Sony 10:1 as an example inside a 105mm id bubble; and as already stated, you do not need any extra electronics to build a PTZ - you just need to add a bit of software to your encoder/codec to output on its serial port (it must have one to set camera parameters).

I attach a video of the prototype and would be interested in any feedback you may have?

[http://www.dbeech-associates.com/brushless\\_dc\\_drive.wmv](http://www.dbeech-associates.com/brushless_dc_drive.wmv)

Please feel free to contact us for more details on this exciting new development.

Best regards

David Beech  
dBeech Associates Ltd

November 2009