## New from LG Motion – state of the art DC motor control by Polaris

Basingstoke based LG Motion design and manufactures a wide range of motion control products and systems. In addition the company works closely with a number of other specialist motion control specialists who are able to offer complementary products to enable LG Motion to provide a most comprehensive range of motion control solutions.

In other words, LG Motion design and develop systems that make things go in and out, up and down and round and round!

#### Servo motor control with Polaris



Polaris<sup>TM</sup> is an advanced off-the-shelf motion control platform. Motion control applications can be realised by using Polaris hardware components which include the controller, drives, digital I/O, analog I/O, other Polaris devices and extensive motion control software which includes function libraries, executables and graphical user interfaces.

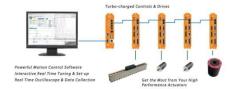
The advanced motion control platform, Polaris™, demonstrates speed, precision and programming flexibility. Polaris has the highest rates and widest dynamic range of any motion control system available. Polaris consists of the Polaris motion controller, Polaris amplifier drives and Mercury™ our Gbit/s real-time network that provides communication between the controller and the drives.

## **Exacting application example**

A leading UK research institute have been developing a state of the art instrument that required the very best control. The instrument does a step scan moving in 0.1 micron and then holding for a second to collect data, then repeating the process. The customer needed a controller with the least "jitter" at standstill.

A Polaris system consisting of an interpolator with integral encoder compensation and a 3 phase linear drive which can achieve sub-nanometer servo performance was recommended and the target performance was immediately achieved and exceeded.

#### The Polaris Motion Control System



# Speed, Precision and Programming Flexibility

Polaris is the world's most advanced off-the-shelf platform for the control and synchronisation of servo motors, Galvos, lasers and other high performance devices. Polaris delivers uncompromised speed and precision and was designed for:

- Very high precision diamond tool machining
- Precision and ultra-precision grinding
- Laser micro machining
- Mills and Lathes with sub-micron tolerance requirements
- CNC machines with integrated tool and part measurement requirements

## Using Polaris will offer you

- Increased system precision
- Higher throughput
- Faster software development
- Access to develop custom features

For more information on how LG Motion can help you with even the most exacting motor control application please contact us:

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