

New from **EMS**: **PiezoMotor LEGS** **The Smaller The Better**

The Swedish company PiezoMotor are the leading force behind many ground-breaking micro motor technologies including the Piezo LEGS®.

Piezo technology is simple and reliable, using very few parts and only elementary motion. Using Piezo motors negates the need for many supplementary components simplifying your design and extending lifetime. The astonishing power and precision of the small Piezo motors offers unique advantages when compared to traditional DC motors of the same size.

Piezo LEGS® is in essence a walking machine constructed in one solid piece. It's about the size of an ant but nearly 1000 times stronger. The construction consists of four legs with each leg being able to elongate and bend when electrically activated. By electrically pairing the legs and observing the transition and sequence of movement, two legs remain constantly in contact with the secondary interface resulting in propulsion of this part. Piezo LEGS® is available in different constructions so that a linear or rotary movement can be achieved.

As the motor relies on friction and the legs remain in contact with the interface at all times high torques can be achieved without the need for a supplementary gearhead and as a consequence no unwanted backlash is introduced into the system. The result is a motor that delivers a step resolution of 1 Nanometre in the linear format and 25 Nanorads in the rotary format. In addition the friction element ensures that the motor remains self-locking with no power applied making them ideal for handheld battery powered devices.

For more information on the PIEZOMOTOR range, visit www.piezomotor.se

The PIEZOMOTOR product range is exclusively distributed in the UK and Ireland by Electro Mechanical Systems Ltd, to find out more about the products and services EMS can offer please visit our website at www.ems-limited.co.uk or call one of our sales engineers today on 0118 9817391.

