April 30, 2015 - Optimal Engineering announces AT10-120, a high resolution, low profile, high load vertical lift stage that can be easily integrated into almost any application.

The large 220 mm x 140 mm (8.7 in. x 5.5 in.) drilled and tapped platform has a vertical travel of 110 mm (4.3 in.). The twin lead (right and left hand thread) precision ground screw and six guide rails provides smooth, flat (parallel to mounting surface), vertical motion, and high resolution to 5 µ (non-microstepping) and 0.50 µ (10 Microstep Driver), and repeatability is 10 µ at travel speeds of 5 mm/sec. Applications for the AT10-120 vertical lift stage include: Testing, inspection, assembly, sampling, laser drilling and machining in a broad range of industrial, medical, semiconductor, and research facilities.

The AT10-120 low profile 90 mm (3.54 in.) vertical stage is constructed of black-anodized aluminum alloy and weighs just 6 kg (13.23 lbs). The powerful 2-phase NEMA 23 Stepper and inclined plane and scissor lift concept offers higher load capacity to 15 kg (33 lbs) compared to vertically mounted stages, and without the concern for cantilevered effects (loss of parallelism), additionally, the moving platform has access from all four sides, and the base plate has easy to access holes for mounting.