



SOM-505020

The SOM-505020 is the smallest one of SmarAct's microscope stages that offer vertical travel direction. The X and Y-axis travel ranges are 31 mm and 12 mm on the Z-axis. The stage's dimensions are 112 mm in length, 100 mm in width and 3.5 mm in height. Since the SOM-505020 is based on SmarAct's SLC series linear stages, it offers highest closed-loop repeatability and nanometer resolution.

Compatibility with common manufacturers is ensured by adapters for standard inserts. The base plate of the microscope stage is breadboard compatible. Cover plates as well as the stages themselves are highly customizable.

Travel X: 31 mm Travel Y: 31 mm Travel Z: 12 mm
Dimensions: 112 x 100 x 33.5 mm

	Mechanical
Travel [mm]	31 (X); 31 (Y); 12 (Z)
Blocking Force [N]	≥ 3.5/ ≥ 5.5
Max. Normal Force [N]	15
Dimensions [mm]	112 x 100 x 33.5
Weight [g]	410
	Open-loop
Velocity [mm/s]	> 8
Open-Loop Resolution [nm]	< 1
	Closed-Loop
Sensor Resolution MCS2 [nm]	1 (S) 4 (L)
Uni-Directional Repeatability MCS2 [nm]	±50 (S), ± 100 (L)
Sensor Resolution (H)CU [nm]	50 (L)
Uni-Directional Repeatability (H)CU [nm]	±1000 (L)
	Options
Material Options	Aluminum base as standard; Black anodized (-BK)
Vacuum Options	HV (1E-6 mbar); UHV / UHVT (1E-11 mbar)
Non-Magnetic Option	Upon request