PICOSUN™ R-200 Advanced ALD System

Technical features

Substrate size and type	50 – 200 mm single wafers Max. 150 mm wafers in vertical batch of 5 - 15 pcs (depending on process) Special option: Max. 200 mm wafers in vertical batch of 5-15 pcs (depending on process) 156 mm x 156 mm solar Si wafers 3D objects Powders and particles Roll-to-roll, max. 70 mm width substrate Porous, through-porous, and HAR samples
Process temperature	50 – 500 °C, higher on request
Substrate loading options	Manual loading with a pneumatic lift Semi-automatic loading with a load lock and a magnetic manipulator arm Semi-automatic loading in PICOPLATFORM™ 200 cluster configuration with a single wafer load lock and a Brooks MX400™ or MX700™ central vacuum robot Fully automatic 25 wafer cassette-to-cassette loading in PICOPLATFORM™ 200 cluster configuration with a Brooks MX400™ or MX700™ central vacuum robot
Precursors	Liquid, solid, gas, ozone, plasma (max 4 gases) Up to 12 sources with 6 separate inlets (7 with plasma)
Weight	350 + 200 kg
Dimensions (W x H x D)	Depending on options Minimum 146 cm x 146 cm x 84 cm Maximum 189 cm x 206 cm x 111 cm
Options	Cluster tools, PICOFLOW™ diffusion enhancer, integrated ellipsometer, QCM, RGA, UHV compatibility, N_2 generator, gas scrubber, customized designs, glove box compatibility for inert loading
Acceptance criteria	Standard tool acceptance criteria with Al_2O_3 process