

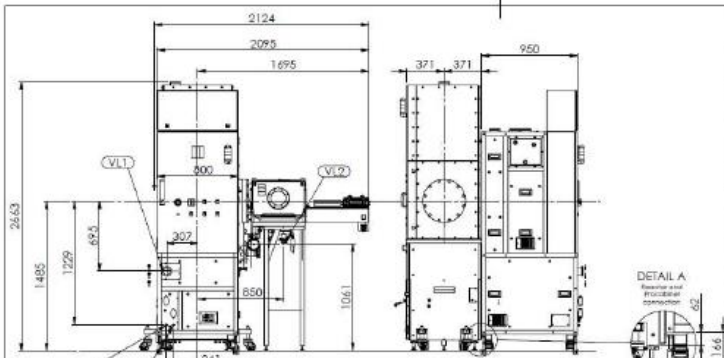
Picosun P-300BV Pro ALD system

Model: P300BV

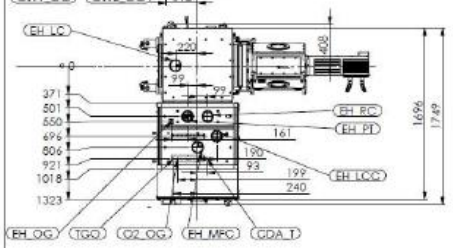
Maker: Picosun

ITEM	QTY	DESCRIPTION
Reactor	1	<p>PICOSUN™ P-300BV Pro ALD reactor with four separate precursor inlets, each with own MFC, pulsing valve and PT. Maximum deposition temperature of the ALD reactor is 500 °C.</p> <p><u>The Product includes:</u></p> <ul style="list-style-type: none"> ✓ Vacuum chamber (AISI304) <i>Stainless steel vessel with KF connection flanges</i> ✓ Reaction chamber (AISI316L) RC-300 (4 inlets) <i>Chamber and lid with top flow precursor distribution geometry</i> ✓ Sample holder for max 150mm*25 wafers ✓ Pro source control and electronics system
Software	1	<p>Pro software with a touch panel PC <i>Touch panel PC and electronics cabinet used for operating the ALD reactor with ALD-software and electronics. Can also monitor the tool during deposition and store recipes.</i></p>
Precursor sources	4	<p>3 Picosolution™ 600 source systems for high vapor pressure liquid precursors for e.g. Al₂O₃, Water and TiO₂.</p> <p>1 Picohot™ 300 heated source system for low vapor pressure precursors, e.g. SiO₂</p> <p>Each precursor line is connected to a carrier/purge nitrogen line.</p>
Picozone Ozone Generator	1	<p>PZ-200 Sumitomo Ozone Generator and PicoGas™ source line connections, MFM, gauge and control interfaces.</p>
Vacuum pump	1	<p>Edward iXH610 dry vacuum pump, afterburner and a mechanical foreline particle trap included.</p>
PicoLoader	1	<p>The Hineloader for cassette transfer for 150mm*25 wafers</p>
	1	<p>Scroll Pump (Edwards nXDS10i 11.4 m3/h) with ultimate pressure at 7x10⁻³ mBar</p>
Warranty	1	<p>12 months warranty after tool acceptance.</p>
Commissioning, installation and user training	1	<p>Commissioning (installation, including acceptance tests), Basic user training for the equipment during installation, for any number of people is included in the price.</p>

Facilities requirements, supplied by the Buyer: Electricity, leak tester with helium, chemicals, pump lines, pump exhaust line, gas lines, compressed dry air (4-5.5 barg pressure), cooling water (for the plasma generator and dry pump), argon line (for plasma generator) and nitrogen line (min. 2/50 slm flow, 99.999 % min. purity (99.9999 % for nitrides), 1-2 barg pressure for the ALD unit and the dry pump.



CONNECTION POINTS OF THE REACTOR	
For detailed information see <i>UMSitz manual</i>	
ELJ	AID Reactor's Electricity (in page 2/3)
TGQ	Process carrier gas N ₂ 1/4" male VCR
O ₂ _OG	Gas for Ozone Generator (O ₂): 1/4" male VCR
CDA_T	Clean Dry Air: Ø5 mm push-in
CW1_OG	Cooling water inlet for ozone generator: Swagelok 3/8" tube fitting
CW2_OG	Cooling water outlet from ozone generator: Swagelok 3/8" tube fitting
VLT	Vacuum pump line: ISO KF NW 63
VLR	Vacuum pump line (Load Lock): ISO KF NW 40
EH_LC	Load chamber cabinet Exhaust: Ø100mm
EH_OG	Ozone destroyer (O ₃) Exhaust: 1/4" female VCR
EH_LCC	Liquid chemical cabinet Exhaust: Ø100mm
EH_MFC	MFC cabinet Exhaust: Ø100mm
EH_FT	Particle trap/electrical utility cabinet Exhaust: Ø100mm
EH_RC	Reactor cabinet Exhaust: Ø100mm



FOR OPTIMAL PERFORMANCE	
Ambient temperature	Should stay between 19 and 25 °C
Relative humidity	Should stay between 35 and 65 %

GENERAL INFORMATION		DATE	BY
DESIGNED	10.10.2018	RTS	
APPROVED	01.02.2019	ASR	
Product	Reactor + Procabinel	1005.08 kg	
Part No.	P-300EV, 400325	R103059	2

REVISIONS AND COMMENTS:
 Rev: 2 Update / Change: Power distribution back in the model now Design / Date: ASR 22.08.2018 Approved / Date: ASR 22.08.2018