

PSI 5
PlanE (Planetary Environment)

Chamber parameters		Operational parameters		Optional equipment	
main chamber inner size D x H [m]	0.20 x 0.30	temperature range [K] stability [K]	243 – 323 +/- 0.1 cold plate	temperature control	LAUDA RP 855 temperature range 218 – 473 K
usable inner size D x H [m]	0.16 x 0.28 cold plate	pressure [Pa]	1×10^{-5}	temperature sensor	1 x PT100
irradiation windows material D x t [m]	top lid window Suprasil DN63	pumping units	rotary vane pump Duo20 + TMU261P	pressure sensors	TPG 262 Full Range Gauge
optional interface ports D [m]	CF-F: 3 x DN63	irradiation source	254 nm Hg low pressure D200 inserted deuterium	leak test	Leybold Heraeus Ultratest M2 pressure range $10^1 - 10^{-4}$ Pa; Helium
special features				spectral analysis	Bentham DMC150 measurement range 200-600 nm; smallest measuring step 0.5 nm
electrical connectors interface	—			gas	Argon, Nitrogen, Helium, customised gas mixtures

experiments performed: Mars 500 MIChAm, Planetary Protection (resistance experiments), MiDiv, BioDiv