

AMS Power and Weight Specifications (20.5" Short Chamber)

System	Amps	Volts ¹	Watts	Weight (pounds)	Mass (kilos)
Vacuum Chamber ²				89	40.5
5-Turbo Pumps Under Load	7.2	24	172.8		
5-Cooling Fans	0.625	24	15		
DC Backing Pump ³	2	24	48	18	8.2
Detection					
Balzers Quad				28	12.7
Balzers Ionizer Controller	0.9	115	103.5	26	11.8
RF Box				11.5	5.2
Rack Mount Boxes (w/cables)					
Turbo Pump Control Box				11.5	5.2
Chopper/Heater/Mult. Supply	2	24	48	7.5	3.4
AC/DC 24 V supply				9.5	4.3
SenTorr P. Gauge Controller	0.1	115	11.5	6	2.7
Data Acquisition					
Rack Mount Computer	0.6	115	69	29	13.2
Total			467.8	236	107.3

Design Goals

<1000

<330

<150

Instrument occupies a volume of approximately 3' x 2' x 2' Electronics fit into a half rack

1) All DC powered components can operate with a maximum input voltage of 32 VDC

2) Weight of vacuum chamber includes fiberglass frame (~12 lbs), cooling fans, pressure gauges and 5 turbo pumps

3) AC powered diaphragm backing pump (MD60) uses 2.5 amps at 115VAC, weight is 37 lbs.