

FAARM Power Requirements

Description	Base Power Consumption (kW)	Diversity Factor	Power with Diversity Factor (kW)	Comment
Clean Facility Requirements				N.A.
Water Shield	5	1	5	Estimated by dlp
Veto Shield	5	1	5	Estimated by dlp
Ultra-Sensitive Immersion Tank				Water cooling?
Gamma Counting Stations	15	0.5	7.5	From FAARM documentation
Alpha Counting Stations	15	0.5	7.5	Estimated by dlp
Beta/Alpha Sensitive Surface Screeners	15	0.5	7.5	From FAARM documentation, 10 clean, 5 dirty
Novel Screeners and R&D Space	5	0.5	2.5	Estimated by dlp
Clean Machine Shop	10	0.25	2.5	Estimate based on Majorana
Wet Chemistry	5	0.5	2.5	Estimated by dlp
Bio storage and sample prep	5	0.5	2.5	From FAARM documentation, 20 amps at 220 v
Cryogen infrastructure				N.A.
Water purification infrastructure	10	1	10	Estimate based on LUX
Electroforming				Located in another space
Intermediate Overburden Level				N.A.
Surface				N.A.
Lighting	22.7	0.7	15.9	Space by space summary
Miscellaneous receptacle loads	22.7	0.2	4.5	
Control room and office	5	0.7	3.5	
Air handlers	75	1	75	Extrapolated from LUX/MJ
Subtotal	215.3		151.4	
Chillers	107.7		75.7	50 percent of subtotal
Total (all on)	323.0	Total w/ Diversity	227.1	