



# Installation Requirements

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## Quantum Design MPMS SQUID VSM EverCool™ System



### Required ceiling height, weight and dimension of system:

- See attached drawing.
- The assembled system fits through a 82 cm (32") wide door.
- The system is mounted on casters and can be rolled between different locations.

### Laboratory Ambient Conditions:

- Operating ambient temperature: 10-40 °C (50-104 °F)
- Operating ambient relative humidity: 10-90% (non condensing)

### Cooling:

- Open air flow for pump and electronics cooling.
- The watercooling requirements for the EverCool Compressor are specified below.

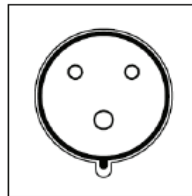
### Vibration:

- The floor should be vibration free. As long as a person cannot feel the vibrations when standing on the floor it should be acceptable.

### Power Rating, Power Outlet and Fusing:

#### Measurement System:

- The measurement system is rated 200-230VAC, 50/60Hz, 10A Max., Single Phase
- The laboratory power outlet is required to be fused to 16A Max.
- The Power cord supplied with the system is 2.5m (10 ft) long. The power outlet should be within that distance from the planned system location or an extension cord will be required (not supplied).
- Laboratory outlet specifications:  
International industrial type connector  
IEC 60309 6H Female,  
16A/250V, 2P+E  
I44 (splash proof)  
Color Code: blue  
Safety approvals: UL/CSA, VDE, IEC



#### EverCool Compressor:

- The compressor needs to be powered from a dedicated circuit breaker depending on the compressor power rating. The compressor power cord has a length of 5m (16ft). Details are specified below.

### Cryogenic Requirements:

For the initial cool down the system requires:

- Two standard size helium gas cylinders

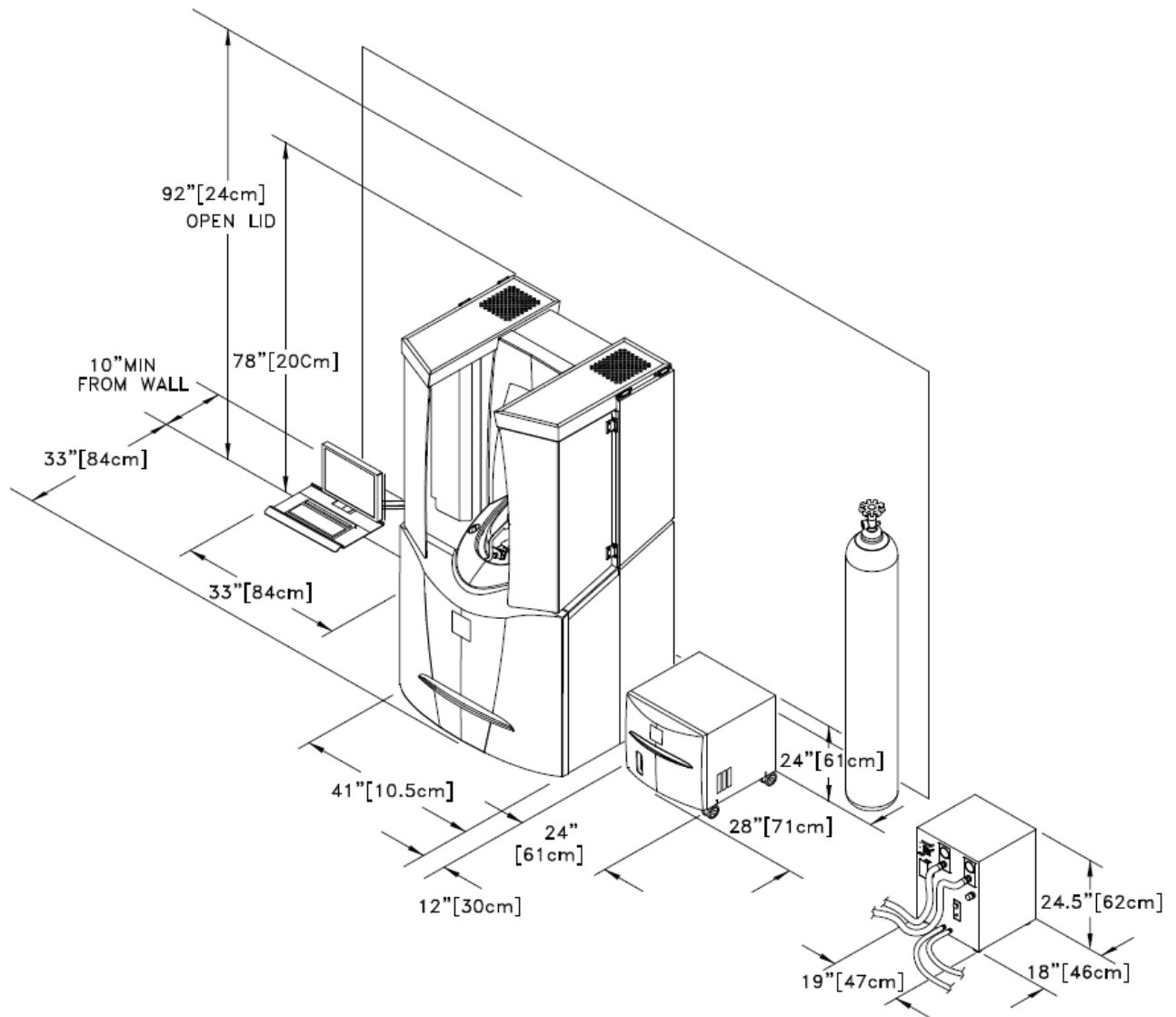
For normal operation the system will require:

- One standard size helium gas cylinder, which should be secured to the wall next to the pump console.  
(Note: some customers might choose a two bottle setup).

### Internet:

- Connecting the system to the Internet is highly recommended. The IT department should open ports 5631 and 5632 from IP 64.73.239.178 for access from QD to allow remote diagnostics and support.
- We recommend to have a telephone near the system.

In case of queries, please contact the Quantum Design Service Center



MPMS SQUID VSM EverCool™ Laboratory Setup.

The helium gas supply cylinder should be secured to the wall, next to the pump console. The watercooled compressor can be installed in an adjacent room, depending on the length of the compressor lines ordered by the customer and the proximity to the watercooling hook up: Watercooling line length: 50ft (15m), Compressor flex lines: 40ft (12m) or 100ft (30m).