Polar Design Drawings

PASSCAL's strategy for designing cold-hardened seismic systems is driven by the need to maximize heat efficiency and minimize payload while maintaining continuous recording throughout the Polar winter. Our design is for a basic 2W autonomous system. Power is provided by a primary Lithium Thionyl Chloride battery pack and is backed by a secondary, solar charged AGM battery pack. Station enclosures are heavily insulated and rely on instrument generated heat to keep the dataloggers within operating specification. Although insulated, broadband sensors are operated close to ambient temperature.

**Drawings**

- Station enclosure drawings
- Insulated sensor vault drawings
- Solar panel mount drawings
- Electrical diagrams

Related categories:  Polar Programs  Special Polar Equipment  Summer Only  Year Round

Source URL:  https://www.passcal.nmt.edu/content/polar/design-drawings