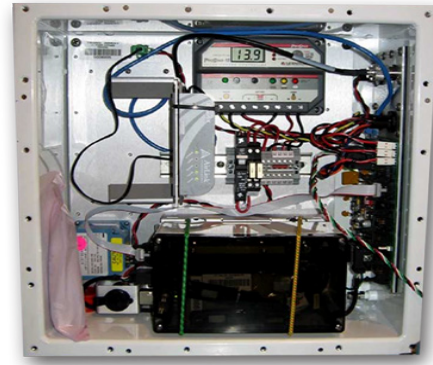


Vault Enclosure

VIE includes in one package all ancillary and auxiliary equipment of a seismic station. Only the seismometer, accelerometer, and Q330 digitizer are not included. It makes a seismic station modular, and easy to install and to troubleshoot. VIE was used for more than 10 years at USArray/TA stations and contributed to the more than 99.5% data availability, by adding, among others, flexible and reliable remote control.



BENEFITS

- Allows economical packaging choices for small ancillary devices
- Protects commercial modems, charge controllers and circuit boards
- Simplifies troubleshooting, acts as a field replaceable unit
- Eliminates/protects a lot of cabling and power connections
- Internal cigarette lighter to facilitate maintenance (plugging laptop)
- External connectors: QNET & Serial

FEATURES

- Power Management Controller - Controls the power to Q330, Baler44, seismometer, accelerometer, radio, Environment Sensor (or Vaisala meteorological sensor) and a water pump, as well as the charging from the solar panel
- Minimizes the power consumption when necessary
- Reduces data latency and data gaps (by stabilizing the power)
- Fault free switchover to alkaline backup battery
- Sensor power regulation (improving signal stability)
- Filtered power for recording equipment (removes spurious waveform spikes and signal level changes)
- High efficiency regulation, load shedding/mode switch on backup power
- Independent fault isolation of powered devices.
- Surge protector for the GPS device
- Visual indicators to quickly assess operational condition and trouble areas, such as automatic reset power cycle for communication equipment, remotely controlled power interrupt for sensor, or monitoring and signaling the operation of an electric pump for underground installations that may get flooded.