SunWize Premium F-Series Battery Enclosures

The SunWize F-Series 4-battery enclosure is used throughout the Plate Boundary Observatory network, as well as in several other permanent GPS station networks in the US. Benefits include reasonable strength (the enclosure is made of aluminum), security (two key locks secure the enclosure), both internal and external knockouts for passing wires and cables, weatherproof seals, and a generous amount of space. Drawbacks include cost ($700-$1000 as of February 2009), size (if on-site space is limited or if equipment must be shipped), and mounting requirements (enclosure is designed to be mounted on a post, which must be cemented into the ground and strong enough to support batteries).

Parts list for the PBO and BARGEN networks, as shown here (DC site):

- Trimble NetRS GPS receiver and dongle
- Trimble NetRS DC power cable
- comms device - CDMA modem, radio modem, or VSAT modem (shown here: CDMA modem)
- comms device power cable
- backpanel with charge regulator
- ethernet cable or other comms cable (modem to GPS receiver)
- Huber Suhners (2) for lightning protection
- lightning sponge
- power block to accommodate wiring
- GPS antenna cable pigtail
- comms antenna cable pigtail
- GPS antenna cable pass-through
- comms antenna cable pass-through
- PV wires pass-through
• sealed 100 Amphr batteries (2-4)
• grounding (bolt with copper wire)