

"The modem" refers to a standard ATM-887-LF-OMNI that has been purchased from Benthos and will be used on a deployment during the second week of June. After the deployment the modem will be returned to Benthos (approximately June 18th) to have the following modifications done to it. These modifications need to be completed and the modem returned to MBARI by July 3rd, 2009.

The modem shall be self contained with power source inside its housing using a standard ATM-887 battery complement (2x 001402).

The modem shall have a processor reset line that will be able to be activated and deactivated via top-side control or command. The processor reset line shall be a common collector style output that is capable of sinking 80mA to ground.

The modem shall have a means to be powered from an external source. This external source shall be in an either or configuration with the internal source.

The Burn wire capability shall be the standard for the Benthos burn wire option (13VDC and 1A). After release command, the current/voltage shall be applied indefinitely until commanded to turn off or the batteries exhausted. Burn wire current and voltage will be monitored by the instrument; so that it can be determine if stray power could corrode the burn wire, and log the time and power to burn/release.

The modems are to be used in a Point-to-Point Protocol (PPP) serial link between two Linux hosts.

Communication lines required with modem:

- TX
- RX
- CD
- RTS
- CTS
- DSR
- DTR
- Signal Ground

All lines shall conform to RS-232 levels with voltages while spacing from +3 to +25V and while marking from -3 to -25V.

