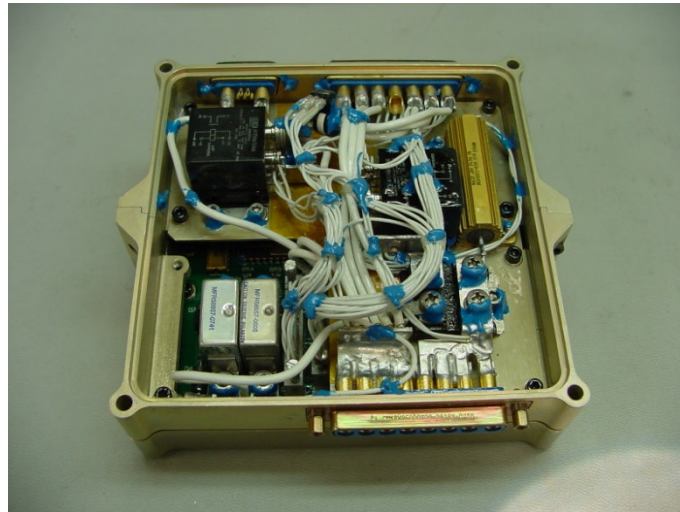




Energy Management Module (EMM)

Battery Management Interface for SmallSats



Supports Multiple, Distributed Energy Stores

The ESM is a generic power subsystem module capable of interfacing to batteries of diverse cell/string configurations and chemistries. The unit is compatible with PnP standards as well as traditional communication interfaces. The ESM essentially allows a traditional battery to be converted to a locally managed energy “brick” accepting charge from an arbitrary number of power sources and providing conditioned power to the spacecraft bus. The ESM may be used in conjunction with Dnet’s Solar Array Controller (SAC) to provide a fully distributed spacecraft power management solution for a broad range of SmallSat missions.

Features

Stackable, extensible design

Supports up to 30A-hr battery

Variety of battery configurations and chemistries supported in configurable code

Phoenix Mode supported entirely within microprocessor, bus power reapplied when battery returns to acceptable state of charge

Local microprocessor logic handles conditioning of attached battery

Relays provide battery and/or solar array isolation from main S/C bus and battery disconnect capability

Modular interface card can be selected for Spacewire or RS-422 communications

Contact Information

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