## **Combining Signals from Multiple Modems to Feed a Single BUC**



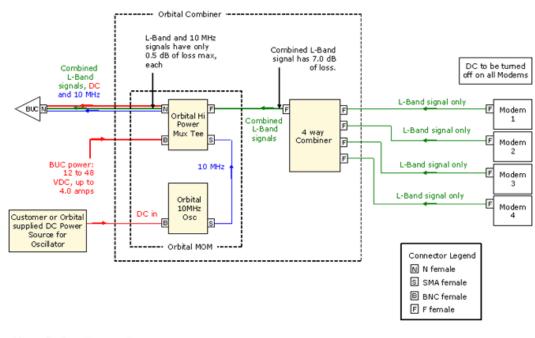
## Using an Orbital 10 MHz Reference Oscillator and a High Power Mux Tee

Here, the signals from four modems are combined and locked to a common 10 MHz reference, and high power DC is inserted to the BUC. If a modem provides the 10 MHz source, an Orbital Mux Tee reversed from its normal orientation will extract the reference signal from a modem, allow it to be re-routed.

If the 10 MHz signal cannot handle a 3.5 dB loss from the Divider or switch, then it can be routed around along with the DC, but then a Mux/Tee is needed for each BUC to reinsert it. Unless the BUC also has a 10 MHz input connector.

Orbital modular designs permit easy access to each signal port for diagnostics, testing, and system maintenance. Modularity also permits easy re-configuration, expansion, and replacement at low incremental cost - the benefits of custom design, the low cost of mass production.

Remember that Orbital Combiners solve the problem of External Reference signals.



Orbital 4-way Combiner with 10 MHz Oscillator and hi power DC insert.

## Signal Line Legend

- DC Power
  - L-Band
  - 10 MHz Reference