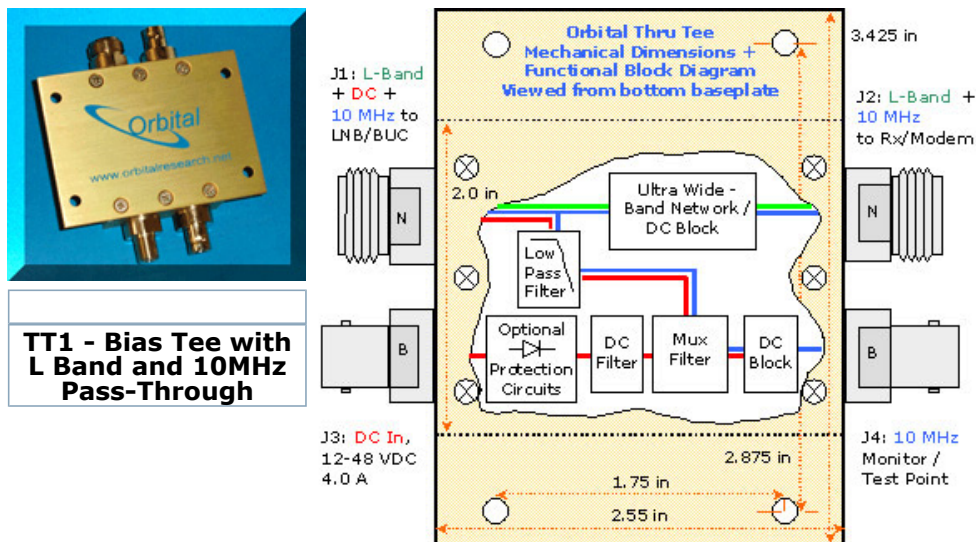


## Orbital Research TT40 - Thru Tee

Two new Systems Interface Products from Orbital answer two old problems:

**Problem 1:** You need a higher power BUC, but your modem cannot supply adequate DC. You need a bias tee and a separate power supply. But conventional Bias Tees shunt the 10 MHz reference signal to AC ground. You could use the MT1 Orbital Mux/Tee, if you have a separate 10 MHz signal, but your modem only supplies 10 MHz up the cable with the L band signal. The excellent MT1 filters the L band, stopping the 10 MHz signal from passing through.



**Solution 1:** Orbital Research introduces the Thru-Tee, that passes both L band AND 10 MHz signals from the modem to the BUC with less than a single dB of insertion loss, yet allows the injection of up to 4 amps of current at 15 to 24 volts DC. Now you have a low-cost, high quality, plug and play solution. Install your new BUC and hook up your new power supply and existing modem to the Thru Tee, and you are ready to go.

**Problem 2:** Stability, phase noise, drift, bit error rate, offset - all problems you have determined can be solved with a good external reference LNB. You may have two BUCs and two LNBs all needing 10 MHz. You have chosen a high quality oscillator as your 10 MHz source, but how do you hook them all together? The risk is that your investment in high quality components can all be invalidated by using a poor quality 10MHz Splitter - remember that your system is no better than the weakest link in your signal chain.



**Solution 2:** Enter the SP10 - 10 MHz Splitter - it will divide the output of the oscillator, feeding equal amounts of signal to up to four devices with minimal loss. It helps ensure that each device does not contaminate the other by providing over 30dB of isolation - it ensures that the other devices connected to the 10 MHz, each with their own peculiarities, cannot affect the other. It prevents such things as switching

noise from a BUC traveling back into your LNB. The SP10 helps provide a quality reference signal to each device, and does not introduce noise, ground-loops, modulation, or any other degradation of the reference signal.

#### Other Orbital Systems Interface Products

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#### Coming next:

Orbital's new line of Ka LNBs include a professional model Ka external reference LNB, the 'Symbiote' - a Ka dual output LNB, and the revolutionary TTL - a thermal lock loop Ka LNB. Our external reference Ka LNB is now in production, and our 'Symbiote' and TTL are at the prototype stage. Due to the high level of interest in these items, we will be requesting customer input with regard to the custom modifications that will be made available on the base products.