

Orbital Research - Professional Quality LNBS

WHAT YOU ALWAYS SEE...



WHAT YOU CAN FINALLY GET!



LNBS used to be a white box filled with mysterious microwave magic, but provided no definition of what was inside, what it did, or how well it was done. Sure, everyone talked about noise figure and gain, but when you opened the carton and took out your new LNB, did you know what you were getting? Was it the newest and best that engineers have to offer, or just another generic hunk of aluminum?



Orbital is proud to introduce our latest LNB where proven design integrates state of the art components with environmentally reliable mechanical enclosures.

But we have a problem. Keeping those proven mechanical designs means that our newest and best LNB looks exactly like the old version. So we decided that we have to tell you exactly, and in great detail, right on the label, just exactly how good the product is.



We will tell you the measured noise figure at the start, middle, and end of the band.

We will tell you the measured gain at the start, middle, and end of the band.

We will tell you the measured phase noise at three decades of offset.

...and all of our numbers are actual measurements, not some imaginary average graded by the marketing department, or some maximum number tested on one unit and assumed to be met by all, they will not be some spec that might or

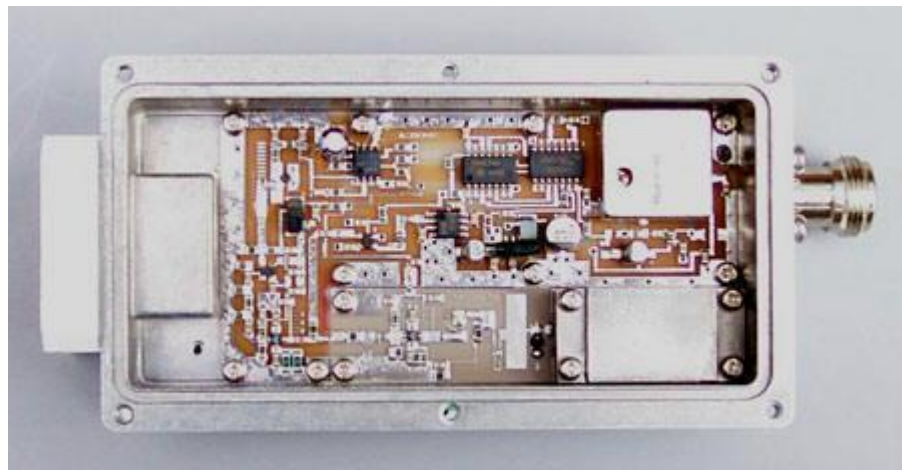
might not be accurate. The numbers on your LNB will belong to this *individual* product.

And if that is not enough, we have a supplementary program of certification, where our technical team can test, tune, tweak, and document any specification that you want enhanced. Would you like to know the compression point for use with high-power birds, or perhaps the input VSWR for sensitive threshold applications? Do you need to know the local oscillator drift, or offset characteristics?

In addition, we have the depth and breadth to customize your LNB for characteristics like extended bandwidth, (up to 1.05 GHz), custom gain configurations, different local oscillator frequencies, different input start and stop frequencies, and different output start and stop frequencies. We can create different applications, like test-loop translators, terrestrial microwave links, and custom multi-band military LNB assemblies. After all, we have been doing this since 1977, and all that experience is your for the asking.



But let's taking a look inside the box and see what is going on and why what comes out is so much better.

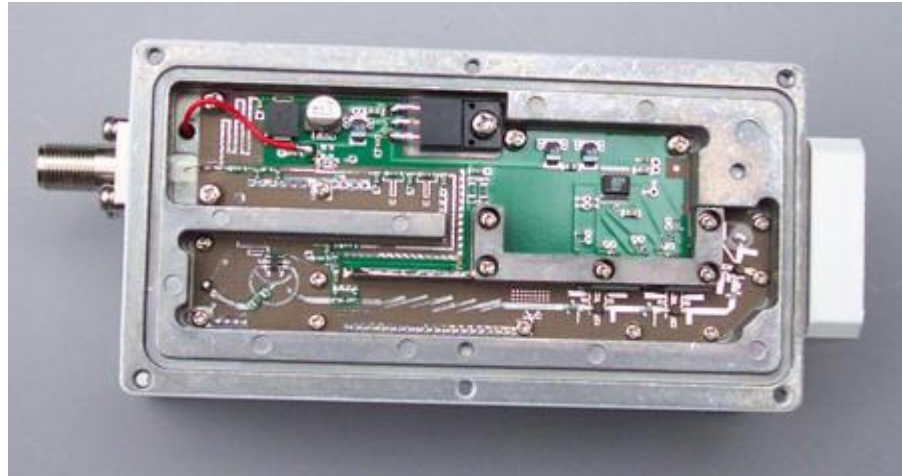


Most LNB designs are years old, using components that are approaching the end of their life cycle, some even obsolete. That LNB you just bought may have been designed ten years ago, from components that are even older. Electronics is the most dynamic industry on the planet, and the pressure to innovate is unrelenting.

New parts manufacturing techniques are pushing the boundaries of performance and specifications ever further. For example, new transistors are quieter, cheaper, and better than components only a few years old. LTCFC (low temperature co-fired ceramic) manufacturing is building smaller, better, and more consistent filters, inductors, capacitors, and resistors. New chip technology developed for the computer industry is allowing integration of components. What used to take two dozen components is now in a single chip. Even simple things like the circuit board have improved materials for better dielectric control, and better thermal characteristics for consistent unit-to-unit performance.



**...and just one more
peek, for good
measure.**



**If you wish to see actual test results and specifications for this product, they can
be viewed at: www.orbitalresearch.net**

Or you can contact us at: davidzovic@orbitalresearch.net

Or by phone at: 1-604-856-0305