

## Alarm Reporting LNBs and BDCs

Redundancy is about a system surviving disaster - an environmental calamity, such as a lightning strike, or a failure in a complex component, such as an LNB or a BDC. Most redundant systems only switch to a backup LNB on a change in current consumption. Sometimes though, a component failure in an LNB or BDC doesn't result in a change in current consumption - it only results in loss of lock, and then your expensive redundancy system does not switch - it doesn't "know" that anything is wrong.

Orbital Alarm Reporting LNBs and BDCs detect loss of lock, and their loss of lock alarm is detected by your existing system the same as if the LNB had experienced a change in current consumption. This allows you to retrofit your existing system to insure against loss of lock simply by upgrading your existing LNBs or BDCs with Orbital LNBs or BDCs that contain a Loss of Lock Alarm. You don't have to lay a new cable, there is no replacement of expensive equipment, just the simple swap-out of your existing LNB for an Orbital LNB with a Loss of Lock Alarm Reporting option. ARM your system against failure due to loss of lock!

The Loss of Lock Alarm reporting option is available for Orbital C, Ku, and Ka band LNBs and BDCs - \$375 US plus cost of LNB.



C-band LNB804

Ku-band LNB813

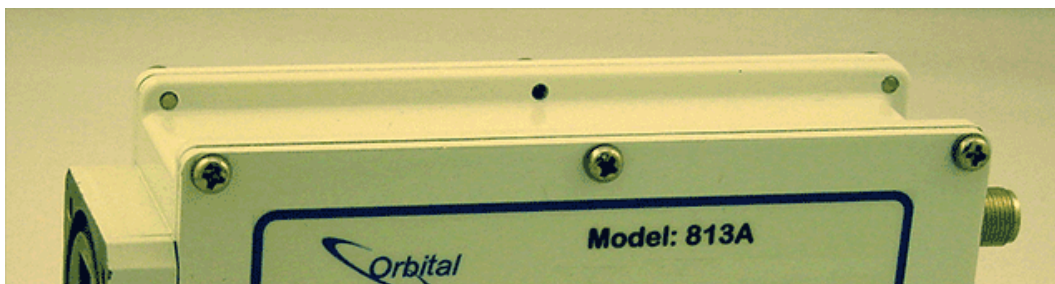
Ka-band LNB692X

The Orbital Ku LNBs listed below are professional quality products, and each has its individual, tested performance results printed on its label. If you look on our website, you will also find each individual product listed in an excel spreadsheet with its unique specifications. Then you can sort the product database for the exact units that best meet your needs for your demanding application. Where else do you know exactly what you are getting, and then get to pick the exact individual unit that you want?

Perhaps after you have selected your unit, you decide that you want a custom connector, or a custom frequency. Perhaps your job requires a custom LO, or external DC power. Maybe you need dual power. You might want an "always on oscillator" because this unit is in a reserve position in a redundancy application, and you want it to lock instantly if it is called on-line. It could be that you want your LNB to signal failure if it loses lock, so that it will switch to a backup.

Often, custom bandwidths are required - perhaps wide banding so that the entire band can be covered with a pair of LNBs or BDC modules.

Standard or customized, all of our units are individually tested and share the same level of Orbital quality - and it will all be right there on the label.



The following is a list of commonly requested LNB frequencies and bandwidths.

BDC Modules are also available in the following frequencies.

Just because you do not see a product listed does not mean that we cannot make it. Please inquire.

C-band 804 Series (PLL)					
Ripple: 0.5 dB typ / 36 MHz segment		Drift: ± 10 KHz		Gain: 40 to 60 dB	
				Noise Figure: 25 K	
Part #	LO	Input (GHz)	Output (GHz)	Bandwidth	
LNB515S-500P-W-?-??	5.15	3.70~4.20	0.95~1.45	0.500	Stock \$325 US
LNB515S-600P-W-?-??	5.15	3.60~4.20	0.95~1.55	0.600	Stock \$325 US
LNB515S-800P-W-?-??	5.15	3.40~4.20	0.95~1.75	0.800	Stock \$325 US
?		Output Connector Choice		F,N,S,T	F,N,SMA,TNC
??		Gain choices		40,50,55,60	dB
Standard unit		In stock		Delivery less than 1 week	
Modified unit		Modified frequency, LO, or bandwidth		Call for delivery	
Ku-band 813 Series (PLL, also available in external reference)					
Ripple: ±0.5 dB max / 27dB segment		Drift: ±25 KHz max		Gain: 40 to 65 dB	
				Noise Figure: 0.8 dB maximum	
Part #	LO	Input (GHz)	Output (GHz)	Bandwidth	
LNB1000S-750P-W-?-??	10.00	10.95~11.70	0.95~1.70	0.750	Stock \$249 US
LNB1075S-500P-W-?-??	10.75	11.70~12.20	0.95~1.45	0.500	Stock \$249 US
LNB1130S-550P-W-?-??	11.30	12.25~12.75	0.95~1.45	0.500	Stock \$325 US
LNB975S-1000P-W-?-??	9.75	10.70~11.70	0.95~1.95	1.000	Modified unit
LNB1015S-500P-W-?-??	10.15	11.70~12.20	1.55~2.05	0.500	Modified unit
LNB1025S-500P-W-?-??	10.25	11.20~11.70	0.95~1.45	0.500	Modified unit
LNB1050S-500P-W-?-??	10.50	11.45~11.95	0.95~1.45	0.500	Modified unit
LNB1050S-750P-W-?-??	10.50	11.45~12.20	0.95~1.70	0.750	Modified unit
LNB1060S-500P-W-?-??	10.60	11.70~12.20	0.95~1.45	0.500	Modified unit
LNB1075S-1050P-W-?-??	10.75	11.70~12.75	0.95~2.00	1.050	Modified unit
LNB1125S-550P-W-?-??	11.25	12.20~12.75	0.95~1.50	0.550	Modified unit
?		Output Connector Choice		F,N,S,T	F,N,SMA,TNC
??		Gain choices		40,50,55,60	dB
Standard unit		In stock		Delivery less than 1 week	
Modified unit		Modified frequency, LO, or bandwidth		Call for price and delivery	
Ka-band (DRO)					
Ripple: 1 dB p-p max over any 33 MHz segment		Drift: ±1.0 MHz		Gain: 50, 55 nominal	
				Noise Figure: 1.3 dB maximum	
Part #	LO	Input (GHz)	Output (GHz)	Bandwidth	
LNB1725F-1000D-W-?-??	17.25	18.20~19.20	0.95~1.95	1.000	Stock \$210 US
LNB1825F-1000D-W-?-??	18.25	19.20~20.20	0.95~1.95	1.000	Stock \$210 US
LNB1925F-1000D-W-?-??	19.25	20.20~21.20	0.95~1.95	1.000	Stock \$210 US
LNB2025F-1000D-W-?-??	20.25	21.20~22.20	0.95~1.95	1.000	Modified unit
?		Output Connector Choice		F,N,S,T	F,N,SMA,TNC
??		Gain choices		40,50,55,60	dB
Standard unit		In stock		Delivery less than 1 week	
Modified unit		Modified frequency, LO, or bandwidth		Call for price and delivery	
Ka-band (external reference)					
Phase Noise Using Orbital MOM		POP		Gain: 50, 55 dB	
				Noise Figure: 1.8 dB max, 1.2 dB nominal @ 23°C	
-20 dBc / Hz	@ 10 Hz	-50 dBc / Hz		Input stability: Unconditionally stable for all possible input loads	
-60 dBc / Hz	@ 100 Hz	-70 dBc / Hz		Output stability: Unconditionally stable for all possible input loads	
-80 dBc / Hz	@ 1 kHz	-90 dBc / Hz		Input VSWR: 2.5 to 1 nominal	
-80 dBc / Hz	@ 10 kHz	-90 dBc / Hz		Output VSWR: 2.1 to 1 maximum at 75Ω	
Part #	LO	Input (GHz)	Output (GHz)	Bandwidth	
LNB1725F-1000X-W-?-??	18.2	18.20~19.20	0.95~1.95	1.000	Call for quote
LNB1825F-1000X-W-?-??	19.2	19.20~20.20	0.95~1.95	1.000	Call for quote
LNB1925F-1000X-W-?-??	20.2	20.20~21.20	0.95~1.95	1.000	Call for quote
LNB2025F-1000X-W-?-??	21.2	21.20~22.20	0.95~1.95	1.000	Call for quote
LNB2045F-600X-W-?-??	21.4	21.40~22.00	0.95~1.55	0.600	Call for quote

	?	Output Connector Choice	F,N,S	F,N or SMA
	??	Gain choices	50,55	dB
Modified unit		Modified frequency, LO, or bandwidth		Call for price and delivery

### Specials

**LNB1000HK**    10.25    11.20~11.70    0.95~1.45    0.500    Stock



Ku band PLL manufactured by Fujitsu, we will install the connector of your choice of F, N, SMA at no extra charge. Only 30 units remain -

**\$249.00 US.**

Drift:	Noise Figure:	Gain:	Ripple:
±30 KHz	0.7 & 0.8 dB	50 to 65 dB	± 0.25 dB max/36 MHz segment

### LNB4000A



Ku band DRO LNB manufactured by Fujitsu, we will install the connector of your choice of F, N, SMA at no extra charge. Only 45 units remain -

**\$99.00 US.**

Drift:	Noise Figure:	Gain:	Ripple:
±250 KHz	0.7 dB	45 to 60 dB	± 0.25 dB max/36 MHz segment

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### Alarm Reporting LNBS