



2W Ku-Band Block Up-Converter

Neo BUC™ Series are ideal for Broadband VSAT RF terminal.

- 2W Output Power
- Supreme Quality
- Small Size & Mass
- Low DC Power Consumption
- Two year Warranty



Model

Model Number	Description	RF Band (GHz)	IF Band (MHz)	Output Power (dBm)
TB33-APF	2W Ku-band BUC, Std, F	14.00 - 14.50	950 - 1450	+33 min
TB33-APN	2W Ku-band BUC, Std, N	14.00 - 14.50	950 - 1450	+33 min
TB33-BPF	2W Ku-band BUC, Ext, F	13.75 - 14.25	950 - 1450	+33 min
TB33-BPN	2W Ku-band BUC, Ext, N	13.75 - 14.25	950 - 1450	+33 min

Reference

External Reference	Performance
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Input Frequency	10MHz
Impedance	75ohm
Input Power	-5 to +5dBm@ Input port
Phase Noise	-125 dBc/Hz @ 100Hz offset -135 dBc/Hz @ 1kHz offset -140 dBc/Hz @ 10kHz offset

Specifications

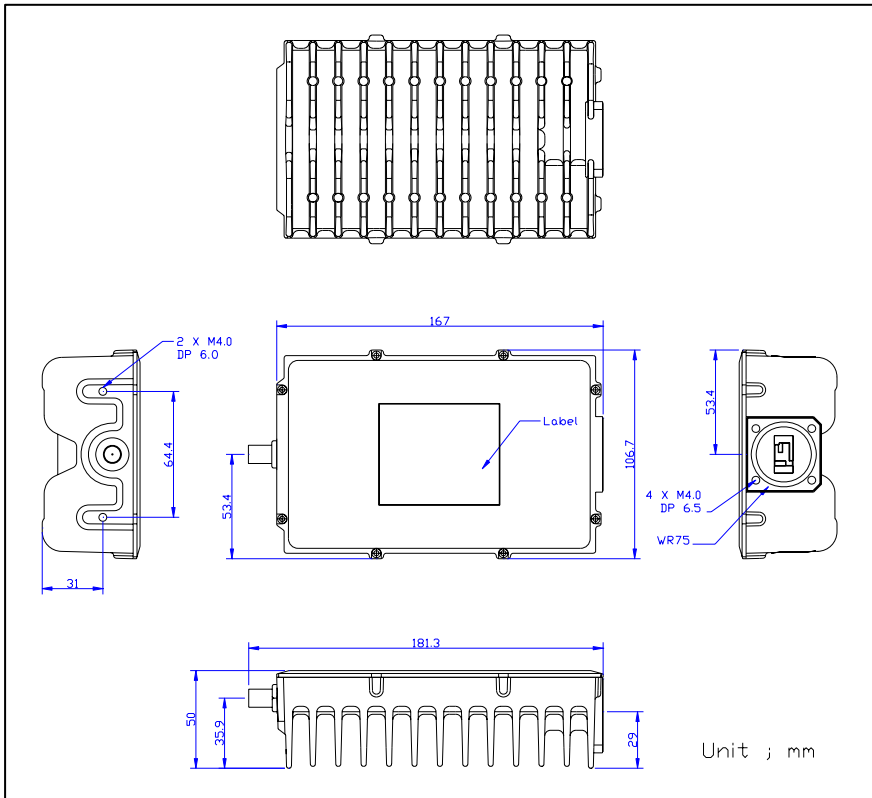
SPECIFICATION	PERFORMANCE
Conversion Type	Single, Fixed L.O.
Frequency Sense	Non-Inverted
Output Power @ 1dB G.C.P.	33dBm min. over temp.
Linear Gain	55 dB nominal
LO Phase Noise	-60 dBc/Hz max. @ 100 Hz -70 dBc/Hz max. @ 1 kHz -80 dBc/Hz max. @ 10 kHz -90 dBc/Hz max. @ 100 kHz
Input V.S.W.R.	2 : 1 max.
Output V.S.W.R.	2 : 1 max.
DC Power Requirement	+15 to +24 VDC
Mute	Shut off the HPA in case of L.O. unlocked
Input Interface	F-type: Female, 75ohm N-type: Female, 50ohm
Output Interface	Waveguide, WR-75
Dimensions (w/o connector)	167x107x50(mm)
Weight	1.1kg
Temperature Range	-40 to +55 C Operational



2W Ku-band BUC

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No	Parameter	Unit	Specifications	Remarks
Input Characteristics				
1	Frequency Range	MHz	950 ~ 1450	
2	Impedance	F / N Connector	Ohms	75
3	Return Loss		dB	9.5
4	Connector		-	F(f)
Output Characteristics				
5	Frequency Range		GHz	14 ~ 14.5
6	Power @ 1dB Comp (dBm)		dBm	33 min.
8	Return Loss		dB	9.5
9	Connector		-	WR75
Transfer Characteristics				
10	Frequency Sense		-	Non-inverted
				LO Freq. = 13.05GHz
11	Linear Gain	Min.	dB	50
		Max.	dB	60
12	Gain Variation	Over 54 MHz	dBp_p	1.5
		Over 500 MHz	dBp_p	4.0
		Over Operating Temperature	dBp_p	4.0
13	Spurious	In Band (Full Span)	dBm	≤ -23
		Out of Band (3GHz Span)	dBm	≤ -45
		Spurious in Rx Band	dBm	≤ -70
14	Mute Output Power	In case of L.O. Unlocked	dBm	≤ -45
15	In Band Noise Emission		dBm/Hz	≤ -95
16	Worst Case LO Leakage		dBm	≤ -45
17	Worst Case Second Harmonics		dBm	≤ -45
				@ 28 ~ 29GHz
18	Rx Band Power Density @10.7~12.75GHz		dBm/Hz	-160
				Rx Band 10.7~12.75GHz
19	L.O. Phase Noise	@100Hz	dBc/Hz	-60
		@1KHz		-70
		@10KHz		-80
		@100KHz		-90
		@1MHz		-100
Miscellaneous				
20	Ref. Singal	Frequency	MHz	10
		Power Level	dBm	-15 ~ +5
	Phase Noise	@100Hz	dBc/Hz	-125
		@1KHz		-135
@10KHz	-140			
21	Shut off the Output when L.O. Unlocked		-	O.K.
22	Operating Voltage		Vdc	15 ~ 24
23	Power Consumption		W	20
26	Operating Temperature		degree C	-40 ~ +55
27	Storage Temperature		degree C	-40 ~ +75
28	Humidity		%	0 ~ 100



Quality Assurance

**NexGenWave products are manufactured under ISO9001:
2000 quality certified facility**



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