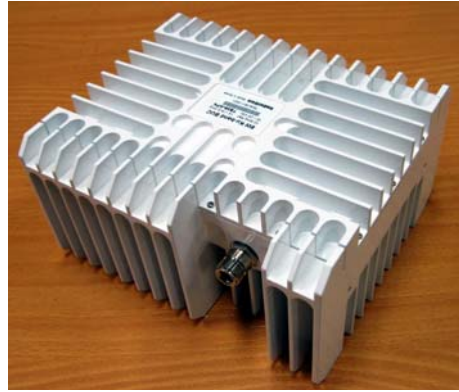




8W Ku-Band Block Up-Converter

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

- 39dBm min. output power
- Optional Shit/Ext-band
- Optional Internal Source
- Optional DC thru MS conn.
- 24/48V DC Power
- Two year Warranty



Model

Model Number	Description	RF Band (GHz)	IF Band (MHz)	Output Power (dBm)
TB39APF-24DC	8W Ku-band BUC, Std, F-type, 24V	14.00 - 14.50	950 - 1450	+39 min.
TB39APN-48DC	8W Ku-band BUC, Std, N-type, 48V	14.00 - 14.50	950 - 1450	+39 min.
TB39APN-48DC/MS	8W Ku-band BUC, Std, N-type, 48V/w MS Connector	14.00 - 14.50	950 - 1450	+39 min.

TB39BPF-24DC	8W Ku-band BUC, Shift, F- type	13.75 - 14.25	950 - 1450	+39 min.
TB39BPN-48DC	8W Ku-band BUC, Shift, N- type	13.75 - 14.25	950 - 1450	+39 min.
TB39CPF-48DC	8W Ku-band BUC, Ext, F-type	13.75 - 14.5	950 - 1450	+39 min.
TB39CPN-48DC	8W Ku-band BUC, Ext, N-type	13.75 - 14.5	950 - 1450	+39 min.

Reference

External Reference	Performance
Input Frequency	10MHz
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

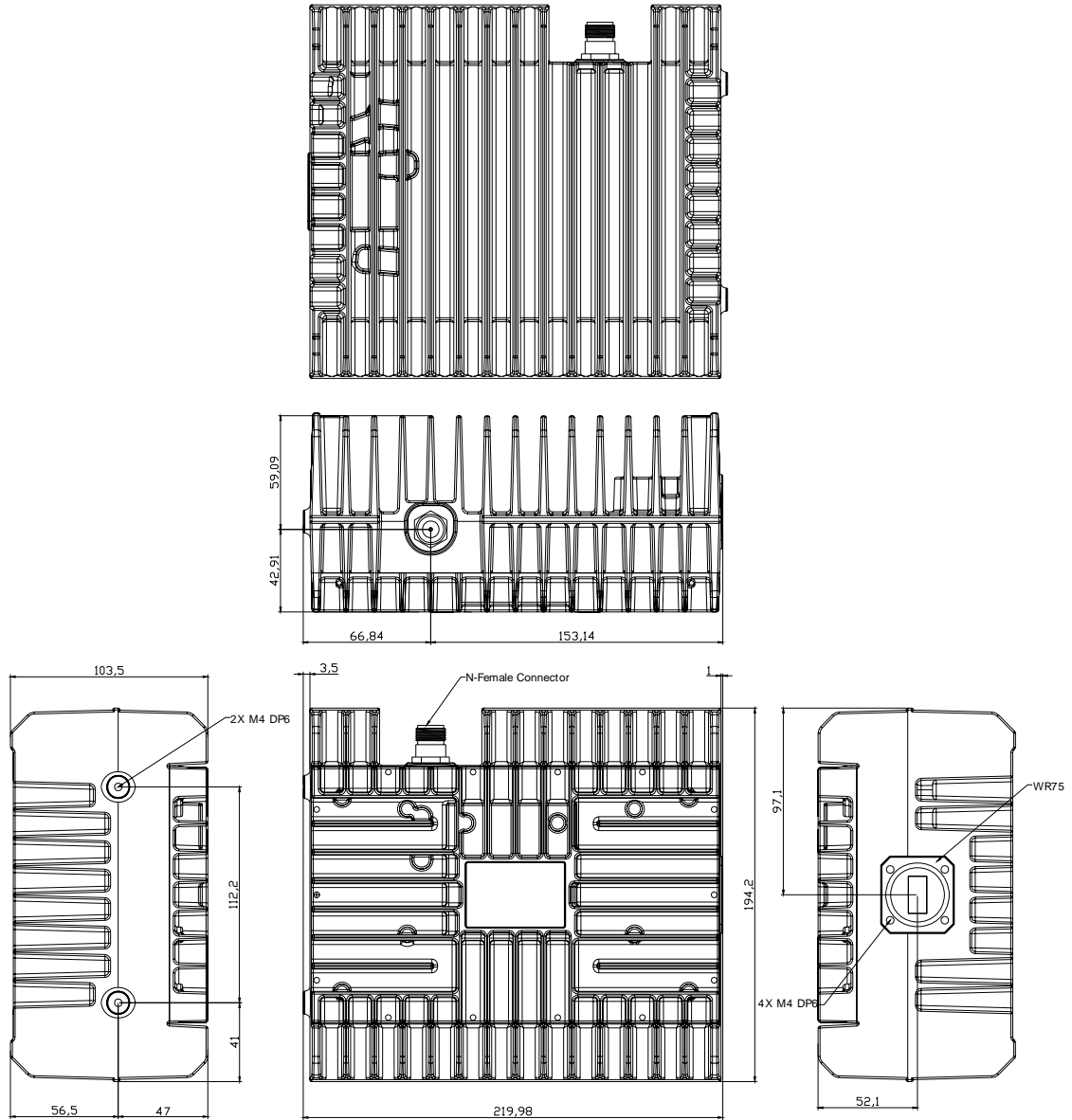
SPECIFICATION	PERFORMANCE
Conversion Type	Single, Fixed L.O.
Frequency Sense	Non-Inverted
Output Power @ 1dB G.C.P.	39dBm min. over temp.
Linear Gain	61 dB nominal
LO Phase Noise	-60 dBc/Hz max. @ 100 Hz -70 dBc/Hz max. @ 1 kHz -80 dBc/Hz max. @ 10 kHz -90 dBc/Hz max. @ 100 kHz
Input V.S.W.R.	2 : 1 max.
Output V.S.W.R.	2 : 1 max.
DC Power Requirement	+18 to +24 VDC , (Optional +36 to 60VDC)
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 (L X W X H)	220/194/104 mm
Weight	4.2kg
Temperature Range	-40 to +55 C Operational

Mechanical Drawing

Nexgenwave Ku 8W BUC

Model Number : TB39APN



Unit : mm



TEST DATA SHEET

Model Number : TB39-APN
 Model Name : Ku 8W BUC
 Serial No. : TB39-XXXX-XXXX

13-Jul-06
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No	Parameter	Unit	NexGenWave	Comments
Input Characteristics				
1	Frequency Range	MHz	950 ~ 1450	
2	Impedance N Connector	Ohms	50	
3	Return Loss	dB	>9.5	
4	Interface		N	
Output Characteristics				
5	Frequency Range	GHz	14 ~14.5	
6	Output Power @ 1dB G.C.P	dBm	>=39	
	OIP3	dBm	46	
7	Spectral Regrowth	dBc	>=26	
8	Return Loss	dB	>9.5	
9	Interface		WR75	
Transfer Characteristics				
10	Frequency Sense		Non-inverted	
Noise Figure				
11	Linear Gain Min.	dB	>60	
	Max.	dB	<70	
12	Gain Variation			
	Over 54 MHz	dB	1.5	
	Over 500 MHz	dB	4.0	
	Over Operating Temperature	dB	4.0	@ Fixed Frequency
13	Spurious In Band (500Hz)	dBc		
	In Band (320KHz)	dBc	<= -50	
	In Band (Full Span)	dBm	<= -23	@ P1dB
	Out of Band (3GHz Span)	dBm	<= -45	@ 26dBm
	Spurious in Rx Band			
	Spurious at rated power			
	Harmonics at rated power	dBm	<= -70	
14	RF Off Tx Enabled	dBm	<= -45	
15	In Band Noise Emission	dBm/Hz	<= -95	
16	Rx Band Power Density	dBm/Hz	<= -170	Rx Band 11.7~12.75GHz
17	Worst Case LO Leakage(@13.05GHz)	dBm	<= -45	
18	Phase Noise 10Hz		-30	Reference Phase Noise (100Hz/1KHz/10KHz/100KHz) -135 / -140 / -150 /-150 dBc/Hz
	100Hz		-60	
	300Hz			
	1KHz	dBc/Hz	-70	
	10KHz		-80	
	100KHz		-90	
	1MHz		-100	
Miscellaneous				
19	Operating Voltage	Vdc	18~24	Optional 48V
20	Power Consumption	W	<= 100	@ Pout=39dBm
21	Start All Temperatures		Pass / Fail	
	Min. Ext Ref Level	dBm	<= -5	
22	Operating Temperature	degree C	-40 ~ +55	
23	Humidity		100% Condensing	
24	Internal Function		Lock Detector shuts off Tx	
25	Dimension	L x W x H mm	212.6 X 162.2 X 92	without N-type Connector
26	Weight	Kg	3.5	

*** Specifications are subject to change without notice**



Quality Assurance

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



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