

Linwave Ka Band High Power Block Up-Converter (Power-BUC)

LW30-797728

TYPICAL APPLICATIONS

- Miniature Ground comms
- Avionics satcom Data connectivity
- Military comms

PRODUCT FEATURES

- Integrated Power amplifier
- Harsh environment tested 55,000 ft operation.
- Frequency variants welcome
- Fan-less operation
- Latest wideband GaN device technology

GENERAL DESCRIPTION

Linwave Ka-Band Block Up Converter is suitable for commercial or military airborne applications including UAVs. The product meets the DO-160G standards for airworthiness along with Boeing, Airbus and ARINC specifications for Commercial Aircraft & Business Jets and MIL-STDs for military aircraft. Latest design GaN technology is utilised alongside our chip and wire hybrid manufacturing; for highly efficient and integrated HPA & BUC. Design options developed to meet customised form factors and is typically found where SWaP-C3 are key considerations. Standard products require no external cooling fan provided a suitable cold surface is available.



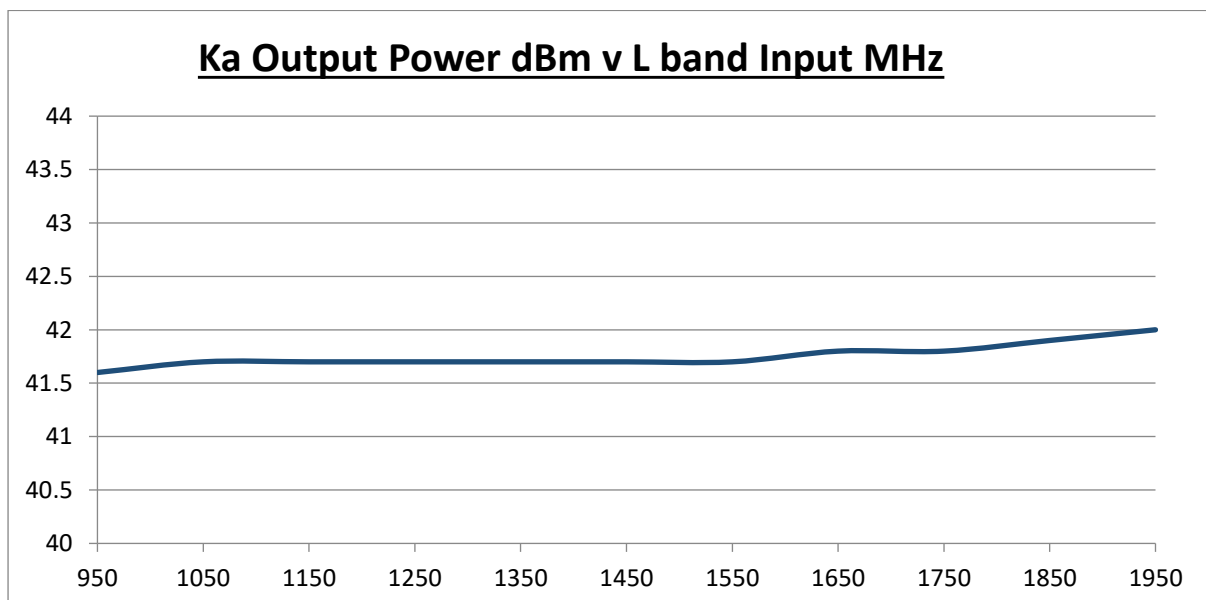
Please contact factory for alternate connector and frequency options

PARAMETER	MIN	TYP	MAX	UNITS
O/P Frequency Range (1GHz switchable bands)	27.5		31.0	GHz
IF	950		1950	MHz
Max Operating Power			+39	dBm
Saturated output power		+42		dBm
Small signal gain		70		dB
Gain Ripple pk to pk fixed freq (any 1GHz band)			3.0	dB
Return Loss i/p and o/p ports	14			dB

Linwave reserves the right to make changes, without notice, in the products, including circuits, standard cells, and/or software, described or contained herein in order to improve design and/or performance. Data sheet draft v1

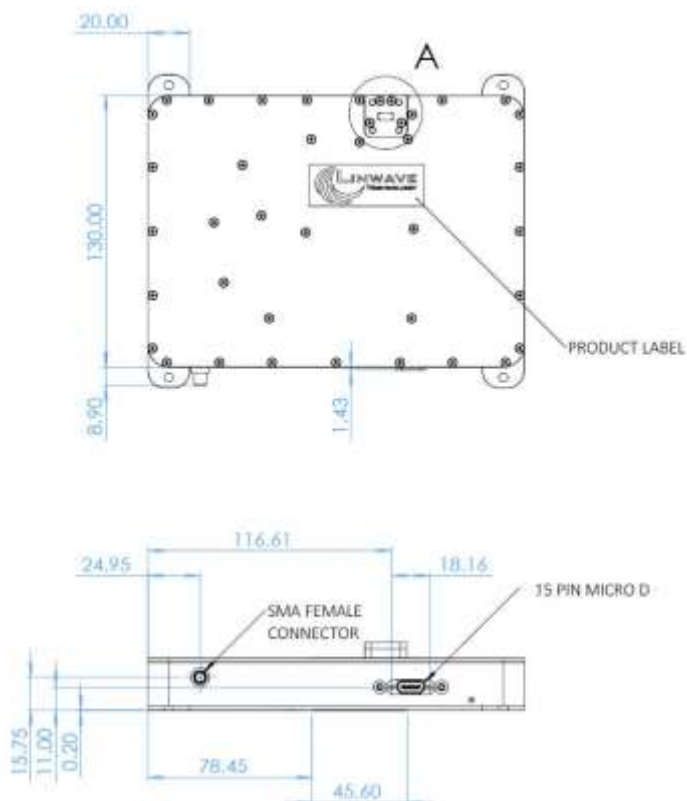
Gain adjustment (0.25dB steps)	20			dB
ACPR @ MOP (BPSK, 1Msps, $\alpha=0.2$, 1.2MHz B/W, 1.2MHz offset from carrier centre frequency)			-20	dBc
Conversion type	Non inverting			
O/P Phase Noise	-50dBc/Hz @100Hz -75dBc/Hz @ 1KHz -85dBc/Hz @10KHz -95dBc/Hz @ 100KHz -105dBc/Hz @1MHz -112dBc/Hz @ 10MHz			
External Ref	50MHz @ 0dBm			
Monitor and Control options	RS422, CANBUS, Ethernet			
Size (excluding input/output connectors and mounting lugs)	180(L) x 130 (W) x 25 (H) mm			
Interface	IF - SMA-F / RF - WG flange WR28			
Operating Temp Range	-55 to +70° C			
Survival Temp	-55 to +90° C			
Altitude	55,000ft max			
Surface Finish	Surtec 650V			

Performance:



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Outline:



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