GaN Based Product

40W Ext. Low Ku-Band BUC

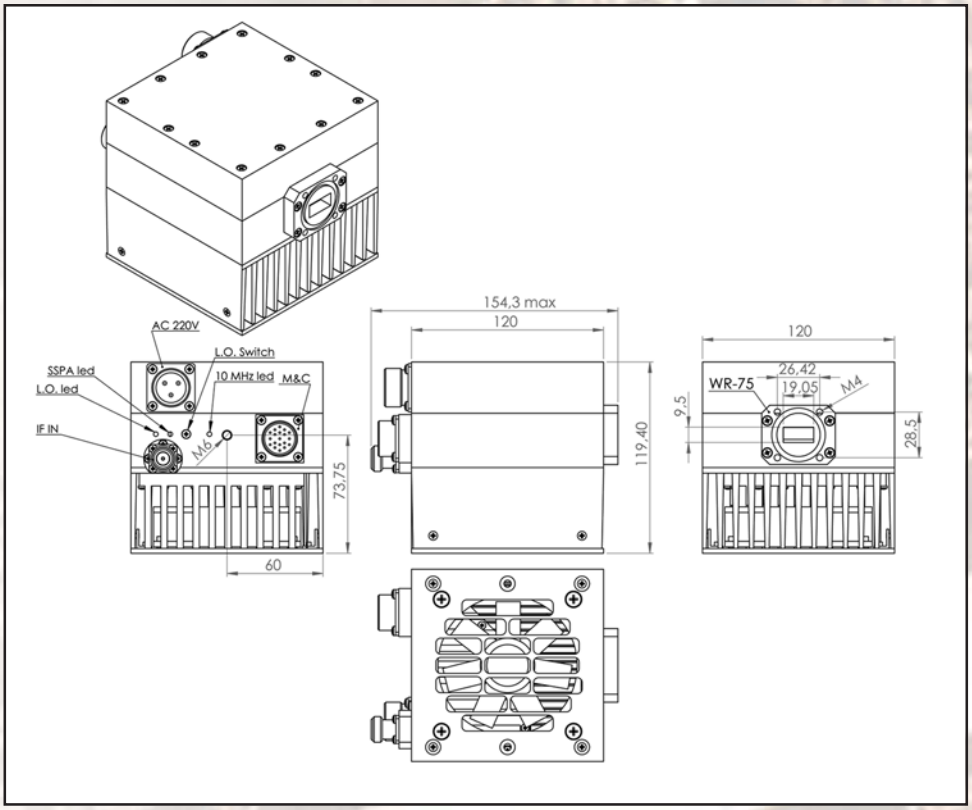
KEY FEATURES

- Output frequency 12.75-13.50 GHz
- Smallest and lightest
- Double - L.O. (electronically and manually switchable (11.80 / 12.05 GHz)
- Auto-ranging 180-260 VAC
- Incomparable Low power consumption (192W max)
- Digital temperature compensation
- Amplifier, L.O. and 10 MHz Reference Status LEDs
- Field-exchangeable (F/N) IF connector
- M&C - combined RS-232/485/FSK (optional)
- Autosensing internal 10MHz high stability 10^{8} reference (optional)
- Ethernet control (optional)
- Three-year warranty
- RoHS compliant

ABD40SKXL / ABD40SKXLF

This smallest and lightest 40WL-To Low Ku-Band Block Up Converter is designed to be mounted on a feed horn. The unit is ideal for portable and mobile applications. Double – L.O. feature makes unit universal for Low Ku-Band requirements. The unit can use either external or internal 10MHz reference.

Mechanical Drawing



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TECHNICAL SPECIFICATIONS	
RF frequency	13.00 to 14.50 GHz 12.75 to 13.50 GHz
Local oscillator- electronically and manually switchable	12.05 GHz and 11.80 GHz
IF frequency	950 to 1,700 MHz
Output power	40W (45.5 dBm min, 46 dBm typ.) 20W P-Linear (43 dBm min.)
IF connector	N-type or F-type (field-exchangeable)
Power supply- auto-ranging	180~260 VAC via IF cable, 192W max
Internal 10MHz high stability reference	10^{-8}
Output interface	WR-75 G
Gain variation over 40 MHz **over 500 MHz** **Over operating temperature**	± 0.8 dB ± 1.5 dB ± 1.5 dB @ fixed frequency
Gain	67 dB min., 70 dB nominal
IMD3 (3dB back off rated output power)	-26 dBc max 2 signal 5MHz apart at P-LINEAR
L.O. leakage	-45 dBm max
Spurious	-53 dBc max
Requirement for external reference frequency input power	via IF cable 10MHz (sine-wave) -5 to +5 dBm @ input port
Phase noise (Exceeds Intelsat's standard IESS308/309)	-55 dBc/Hz max. @ 10 Hz -65 dBc/Hz max. @ 100 Hz -75 dBc/Hz max. @ 1 KHz -85 dBc/Hz max. @ 10 KHz -95 dBc/Hz max. @ 100 KHz -115 dBc/Hz max @ 1 MHz
M&C	RS-232 and RS-485, Ethernet
FSK	Multiplexed on TX IFL, compatible with Comtech and Paradigm
Noise figure	20 dB max
Input V.S.W.R.	2 : 1 max
Output V.S.W.R.	2 : 1 max.
Mute	Shut off the BUC in case of L.O. unlocked
Status LED **Amplifier RED** **GREEN** **L.O. YELLOW** **YELLOW blinking** **10 MHz GREEN** **GREEN blinking** **RED**	 Summary alarm All OK All OK standard L.O. 12.05 GHz All OK extended L.O. 11.80 GHz External 10MHz reference Internal 10MHz reference No 10MHz reference detected
Temperature range (ambient) operating storage	 -40 deg C to +55 deg C -55 deg C to +85 deg C
Dimensions & housing	120 (L) x 120 (W) x 119 (H) mm 4.72" (L) x 4.72" (W) x 4.70" (H)
Weight	2.4 kg (5.4 lbs) max