



40W Ext. Low Ku-Band Block Up Converter

KEY FEATURES

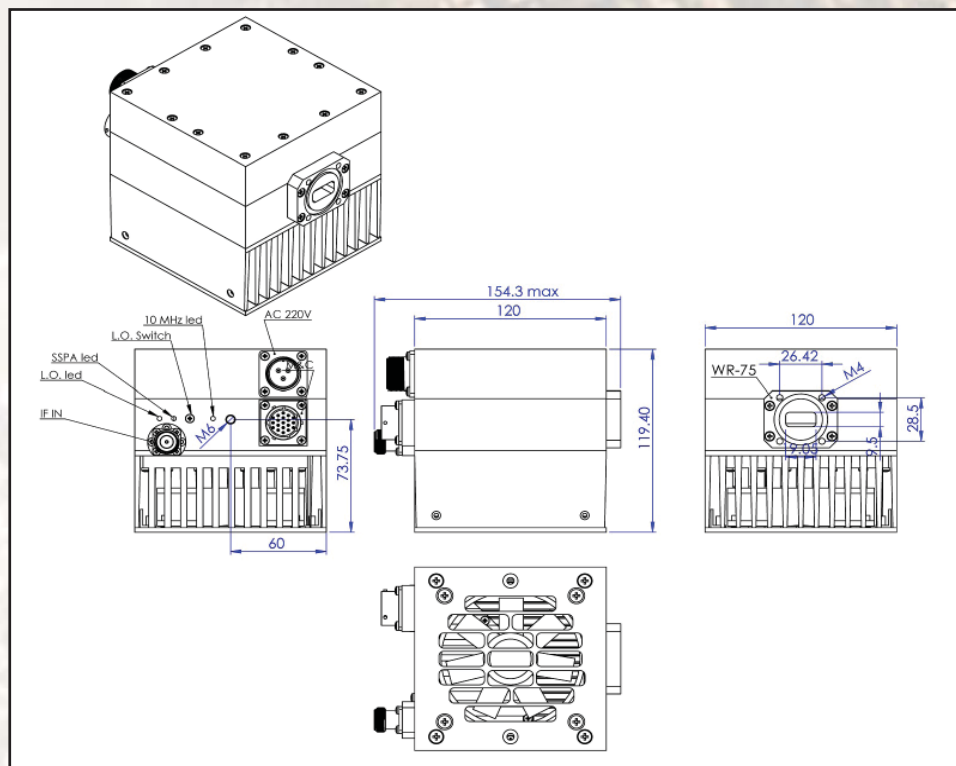
- ◆ Output frequency 12.75-13.50 GHz
- ◆ Double L.O. (switchable 11.80 & 12.05 GHz)
- ◆ Based on GaN technology which enables high efficiency, low power consumption and high reliability
- ◆ Incomparable low power consumption (192 W max.)
- ◆ Auto-ranging powering option 180 - 260 VAC
- ◆ Digital temperature compensation
- ◆ Field-exchangeable (F/N) IF connector
- ◆ Internal auto-sensing and controllable 10MHz high stability reference (optional)
- ◆ Built-in redundancy option
- ◆ Advanced M&C - combined RS-232/485 / Ethernet (HTTP and SNMP ver. 2 & 3) / FSK (optional)
- ◆ RoHS compliant

ABD40SKXL / ABD40SKXLF



This smallest and lightest 40W L-To Low Ku-Band Block Up Converter is based on GaN technology. Incomparable low power consumption, double L.O., field-exchangeable connector, auto-sensing and controllable internal 10 MHz reference make this unit universal for any Low Ku-Band application. M&C (FSK) capability enables troubleshooting, monitoring and controlling the BUC.

Mechanical Drawing





40W Ext. Low Ku-Band Block Up Converter

TECHNICAL SPECIFICATIONS		
RF frequency		13.00 to 13.50 GHz 12.75 to 13.50 GHz
Dual local oscillator		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 MS connector, 192 W max.
Output interface		WR-75 G
Gain		67 dB min., 70 dB nominal
IMD3 (two tones)		-26 dBc max. 2 signal 5 MHz apart at P-LINEAR
L.O. leakage		-45 dBm max.
Spurious		-53 dBc max.
Spectral regrowth (QPSK at 1.5x and OQPSK at 1.0x symbol rate offset with 2dB back-off from rated output power)		-30 dBc
Requirement for external reference: frequency input power		via IF cable 10 MHz (sine-wave) -5 to +5 dBm @ input port
TX Gain variation		± 0.5 dB over 40 MHz ± 1.8 dB over full band
TX Gain stability over temperature range		± 1.5 dB typ., ± 1.8 dB max.
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
Noise power density	Transmit Receive	-66 dBm/Hz (max.) -157 dBm/Hz (max.)
Noise figure		15 dB max.
Input V.S.W.R.		1.5 : 1 max.
Output V.S.W.R.		1.5 : 1 max.
M&C		RS-232/485 / Ethernet / FSK (optional)
Mute		Shut off the HPA if L.O. unlocked
Status LED Amplifier L.O. 10MHz	RED GREEN GREEN GREEN blinking 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
Vibration and shock		Complies with MIL-STD-810E
IP rating		IP67
Dimensions & housing		120 (L) x 120 (W) x 119.4 (H) mm 4.72" (L) x 4.72" (W) x 4.70" (H)
Weight		2.4 kg (5.4 lbs) max.