

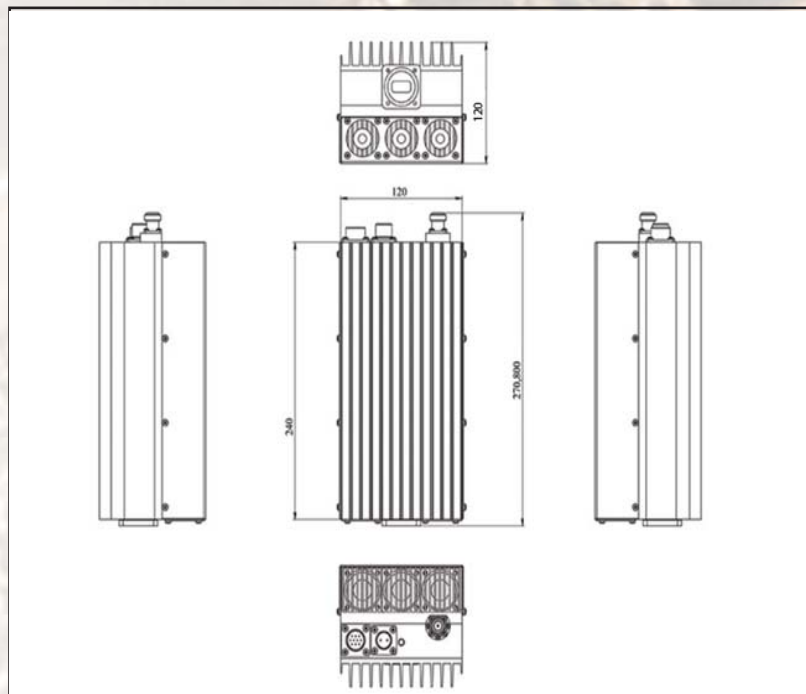


50 W Ext. Ku-Band Block Up Converter

KEY FEATURES

- ◆ Output frequency 13.75-14.50 GHz
- ◆ Smallest package size and weight
- ◆ Double - L.O. (electronically and manually switchable 12.80 and 13.05 GHz)
- ◆ Auto-ranging 36-58 VDC or 80-240 VAC power options
- ◆ Low power consumption (272W max)
- ◆ Digital temperature compensation
- ◆ L.O. lock and amplifier LEDs
- ◆ Field-exchangeable (F/N) IF connector
- ◆ Internal 10MHz high stability 10^{-8} reference(optional)
- ◆ M&C - combined RS-232-485 and optional FSK
- ◆ Three-year warranty
- ◆ RoHS compliant

Mechanical Drawing



ABD50KX / ABD50KXF ABC50KX / ABC50KXF



This smallest and lightest 50W L-To 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 Ku-Band requirements. It can be powered either with 36-58 VDC or 80-240 VAC and consumes less than 272W.



50 W Ext. Ku-Band Block Up Converter

TECHNICAL SPECIFICATIONS

RF frequency	L.O. 13.05 GHz L.O. 12.80 GHz	14.00 to 14.50 GHz 13.75 to 14.50 GHz
Local oscillator		13.05 GHz and 12.80 GHz
IF frequency		950 to 1,700 MHz
Output power @ P1dB min over temp.		50W (+47 dBm min)
IF connector		N-type or F-type (field-exchangeable)
Power supply ABC50KX - auto-ranging ABD50KX - auto-ranging		+36~+58 VDC via MS connector 270W max 80~240 VAC via MS connector 272W max
Internal 10MHz high stability reference		10 ⁻⁸
Output interface		WR-75 G
Gain variation over 40 MHz over 500 MHz		0.8 dB p_p 1.4 dB p_p
Over operating temperature		0.75 dB p_p @ fixed frequency
Gain		65 dB min., 68 dB nominal
IMD3		-28 dBc max
L.O. leakage		-30 dBm max
Spurious		-50 dBc max
Requirement for external reference		via IF cable
frequency		10 MHz (sine-wave)
input power		-5 to +5 dBm @ input port
Phase noise		-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 -120 dBc/Hz max @ 1 MHz
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
Input interface	ABC50KX/ABD50KX ABC50KXF/ABD50KXF	50 Ohm (N-type IF in) 75 Ohm (F-type IF in)
Status LED	RED GREEN YELLOW YELLOW blinking	Summary alarm All OK Standard L.O. 13.05 GHz Extended L.O. 12.80 GHz
Temperature range (ambient)		
operating		-40 deg C to +55 deg C
storage		-40 deg C to +75 deg C
Dimensions & housing		270 (L) x 120 (W) x 120 (H) mm 10.63" (L) x 4.72" (W) x 4.72" (H)
Weight		3.9 kg (8.6 lbs) max