



25 W Ext. Ku-Band Block Up Converter

KEY FEATURES

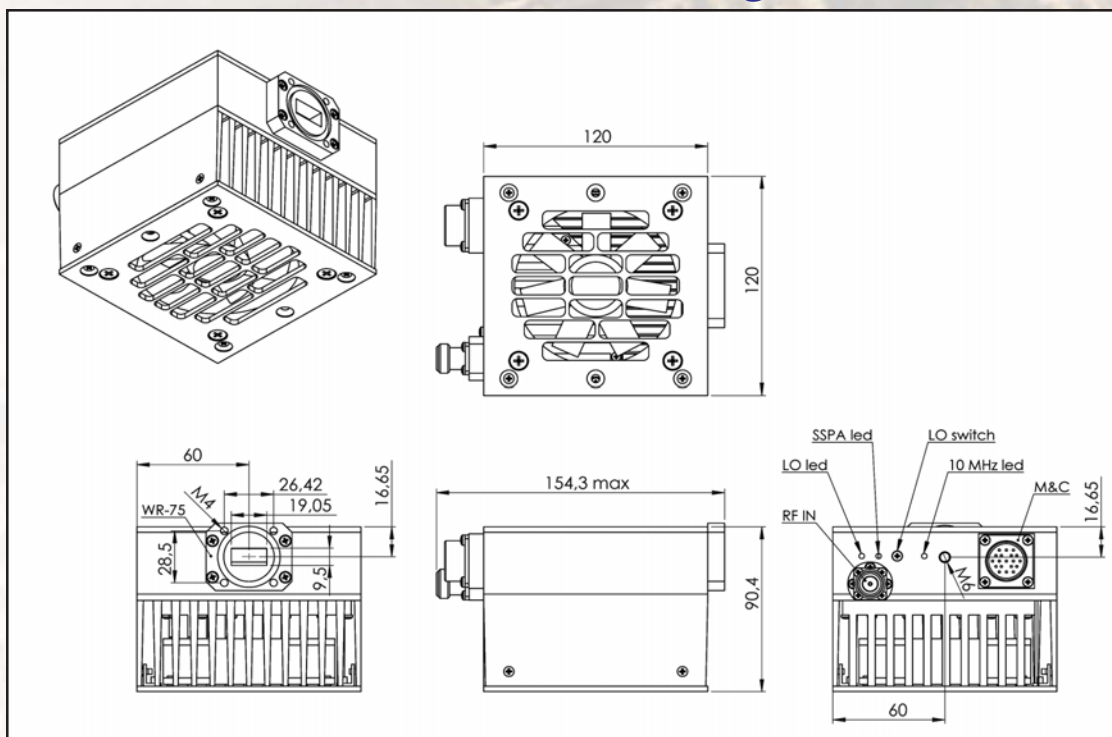
- ◆ Output frequency 13.75-14.50 GHz
- ◆ Smallest and lightest
- ◆ Double - L.O. (electronically and manually switchable (12.80 / 13.05 GHz)
- ◆ Auto-ranging 15-60 VDC
- ◆ Incomparable Low power consumption (120W max)
- ◆ Digital temperature compensation
- ◆ Amplifier, L.O. and 10 MHz Reference Status LEDs
- ◆ Field-exchangeable (F/N) IF connector
- ◆ M&C - combined RS-232/485/FSK (optional)
- ◆ Internal 10MHz high stability 10^{-8} reference (optional)
- ◆ Ethernet control (optional)
- ◆ Three-year warranty
- ◆ RoHS compliant

ABE25SKX / ABE25SKXF



This smallest and lightest 25W 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 is powered either with 24 or 48 VDC and consumes less than 120W.

Mechanical Drawing





25 W Ext. Ku-Band Block Up Converter

TECHNICAL SPECIFICATIONS

RF frequency	14.00 to 14.50 GHz 13.75 to 14.50 GHz
Local oscillator- electronically and manually switchable	13.05 GHz and 12.80 GHz
IF frequency	950 to 1,700 MHz
Output power	25W (43.5 dBm min, 44 dBm typ.) 13W P-Linear (41 dBm min.)
IF connector	N-type or F-type (field-exchangeable)
Power supply- auto-ranging	+15~+60 VDC via IF cable, 120 W 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 ± 1.5 dB p-p
Over operating temperature	± 1.5 dB p-p @ fixed frequency
Gain	65 dB min., 68 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. 13.05 GHz All OK extended L.O. 12.80 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 90.4 (H) mm 4.72" (L) x 4.72" (W) x 3.61" (H)
Weight	1.8 kg (4.0 lbs) max