



10W C-Band Block Up Converter

KEY FEATURES

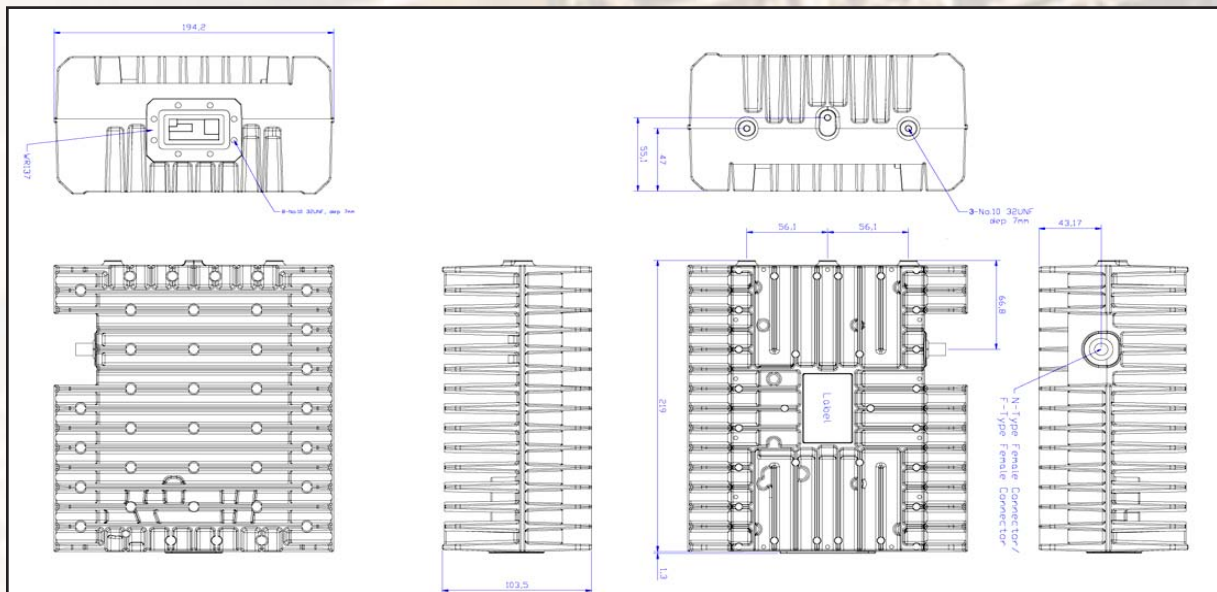
- ◆ Small package size and weight
- ◆ Feed horn mounting
- ◆ “No cooling fan” solution
- ◆ Input side connector
- ◆ Powered through IF cable option
- ◆ Low power consumption (<77W)
- ◆ High power efficiency (10W min @P1dB over temperature)
- ◆ 24VDC / 48VDC / 48VDC via MS connector input power options
- ◆ Standard, Palapa and Extended C-Band options
- ◆ Internal 10MHz high stability 10^{-8} reference (optional)
- ◆ RoHS compliant
- ◆ Three-year warranty

ABA10C / ABA10CF ABA10CP / ABA10CPF ABA10CE / ABA10CEF



This small and light weight 10W L-To C-Band Block Up Converter is designed to be mounted on the feed horn. High power efficiency resulting in low current consumption allows user to pass DC supply voltage via IF cable. The unit is ideal for network and point to point, data distribution, portable and emergency applications.

Mechanical Drawing





10W C-Band Block Up Converter

TECHNICAL SPECIFICATIONS		
RF frequency	ABA10DC	5.850 to 6.725 GH
Local oscillator	ABA10DC	4.90 GHz, non-inverting
IF frequency	ABA10DC	950 to 1.825 MHz
Output power @ P1dB min over temp.		10W (+40 dBm min.)
IF connector		N-type or F-type
Power supply	ABA10DC ABB10DC ABC10DC	+18 VDC~+24 VDC via IF cable 77 W max +36 VDC~+60 VDC via IF cable 75 W max +36 VDC~+60 VDC via MS conn. 75 W max
Output interface		CPR-137 Grooved
Internal 10MHz high stability reference		10 ⁻⁸
Gain		54 dB min., 64 dB nominal
IMD3		-28 dBc max
L.O. Leakage		-45 dBm max
Spurious		-50 dbc max
Gain variation	over 50 MHz over 575 MHz	0.7 dB p_p 2.0 dB p_p
Over operating temperature		2.2 dB p_p @ fixed frequency
Requirement for external reference		via IF cable
frequency		10 MHz (sine-wave)
input power		-5 to +5 dBm @ input port
Phase noise		-53 dBc/Hz max. @ 10 Hz -63 dBc/Hz max. @ 100 Hz -73 dBc/Hz max. @ 1 kHz -83 dBc/Hz max. @ 10 kHz -93 dBc/Hz max. @ 100 kHz -110 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	ABA10DC ABA10DCF	50 Ohm (N-type IF in) 75 Ohm (F-type IF in)
Temperature range (ambient)		
operating		-40 deg C to +55 deg C
storage		-40 deg C to +75 deg C
Dimensions & housing		217 (L) x 194 (W) x 103 (H) mm 8.7" (L) x 7.7" (W) x 4.1" (H)
Weight		4.2 kg (9.3 lbs) max