



20W Ext. C-Band Block Up Converter

KEY FEATURES

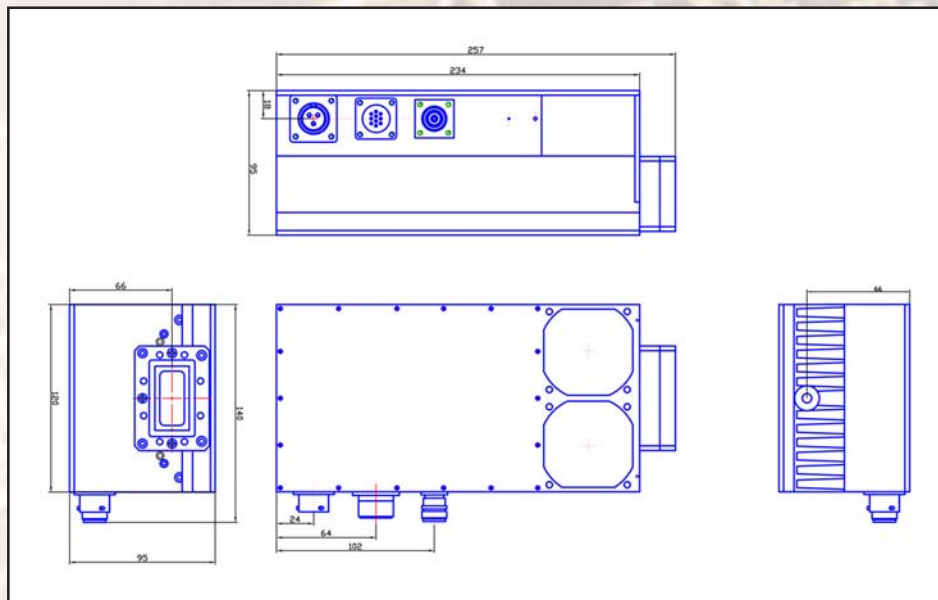
- ◆ 5.850 GHz - 6.725 GHz output frequency
- ◆ Smallest package size and weight
- ◆ High power efficiency (20W min @P1dB over temperature)
- ◆ Digital temperature compensation
- ◆ Field-exchangeable (F/N) IF connector
- ◆ 80 - 240 VAC or 38 - 56 VDC auto-ranging power (148W max)
- ◆ Power and lock status LED
- ◆ Advanced M & C interface - combined RS-232/485 and optional FSK
- ◆ Internal 10MHz high stability 10^{-8} reference (optional)
- ◆ RoHS compliant
- ◆ Three-year warranty

ABD20DC / ABD20DCF ABC20DC / ABC20DCF



This is a unique Ext. C-Band (5.850-6.725 GHz) 20W Block Up Converter powered with auto-ranging 80-240 VAC or 38-56 VDC unit, designed for mobile applications especially when an earth station needs to be able to use different C-Band (Standard and Palapa) transponders or satellites. It's light enough to be mounted on a feed horn of most antennas.

Mechanical Drawing





20W Ext. C-Band Block Up Converter

TECHNICAL SPECIFICATIONS

RF frequency	5.850 to 6.725 GHz
Local oscillator - electronically and manually switchable	4.9 GHz
IF frequency	950 to 1,825 MHz
Output power @ P1dB	20W (+43 dBm min.)
IF connector	N-type or F-type (field-exchangeable)
Power supply via MS connector ABC20DC-auto-ranging ABD20DC-auto-ranging	38-56 VDC, 147 W max 80-240 VAC, 148 W max
Output interface	CPR 137 G
Internal 10MHz high stability reference	10 ⁻⁸
Gain	65 dB min., 72 dB max
IMD3 (3dB back off P1dB)	-28 dBc max
L.O. leakage	-45 dBm max
Spurious	-50 dBc max
Requirement for external reference: frequency input power	via IF cable 10 MHz (sine-wave) -5 to +5 dBm @ input port
Gain variation over 40 MHz over 500 MHz	1.1 dB p_p 1.6 dB p_p
Over operating temperature	1.2 dB p_p @ fixed frequency
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 -113 dBc/Hz max @ 1 MHz
Noise figure	15 dB max
Input V.S.W.R.	2 : 1 max
Output V.S.W.R.	2 : 1 max.
Mute	Shut off the HPA if L.O. unlocked
Status LED GREEN RED	L.O. locked and amplifier functioning normally Power OK, L.O. unlocked
M&C	RS-232 and RS-485
FSK	Multiplexed on TX IFL, compatible with Comtech and Paradise
Temperature range (ambient) operating storage	-45 deg C to +65 deg C -55 deg C to +85 deg C
Dimensions & housing	257 (L) x 120 (W) x 95 (H) mm 10.2" (L) x 4.8" (W) x 3.8" (H)
Weight	3.5 kg (7.7 lbs) max