

## BD732 dual band

### Ku-band block downconverters in 1U 19" chassis Full receive band coverage with dual BDC

#### INPUT SPECIFICATION

1. Frequency range:	10.70 to 11.7GHz (LO), 11.7 to 12.75GHz (HI) single wide band input	
2. Connector:	SMA	N-type
3. Impedance:	50Ω	
4. Return loss:	≥18dB	

#### OUTPUT SPECIFICATION

5. Frequency range:	950 to 1,950MHz (LO) and 950 to 2,000MHz (HI) two independent outputs	
6. Connector:	SMA	N-type
7. Impedance:	50Ω	
8. Return loss:	≥15dB typical	
9. 1dB compression point:	+10dBm min., at full gain	
10. 3rd order intercept:	+23dBm min., at full gain	
11. Input signal power:	Max recommended: 0dBm minus operational gain	

#### TRANSFER CHARACTERISTICS

12. Gain:	20 to 30dB adjustable via remote interface
13. Gain ripple: over any 40MHz transponder:	≤ ±0.3dB p.t.p.
over each operational output band (LO & HI):	≤ ±1.5dB p.t.p.
14. Gain stability with temperature	- 0.03dB/°C
15. External reference:	10MHz, 0dBm nominal (± 3dB)
16. Local Oscillator:	9.75GHz (LO band), 10.75GHz (HI band)
17. Noise figure:	<20dB

#### Spurii

18. Signal independent:	≤ -75dBm at maximum gain
19. Signal related:	≤ -75dBc at maximum gain and 0dBm output

#### PHASE NOISE (\*)

	Typical (*)
20. 10Hz:	<-45dBc/Hz
21. 100Hz:	<-65dBc/Hz
22. 1kHz:	<-75dBc/Hz
23. 10kHz:	<-85dBc/Hz
24. 100kHz:	<-95dBc/Hz
25. 1MHz:	<-100dBc/Hz
26. Mains related:	<-50dBc/Hz

#### MISCELLANEOUS

27. Power supply:	115V/230V ±10%, 50/60Hz ±10%, 20VA
28. Mechanical form and dimensions:	1U 19" frame, 400mm deep
29. Weight:	6kg approx.
30. Chassis material:	Passivated conductive aluminium
31. Temperature: Operating:	-20° to +50°C
Storage:	-50° to +70°C
32. Humidity:	99% non-condensing (**)
33. Summary alarm:	NO and NC dry relay contacts via rear mounted connector
34. Summary alarm indication:	Through front panel LED, parallel and RC&M interface
35. Remote interface:	TCP/IP, SNMP compliant protocol
36. EMC, RoHS, REACH compliance:	EC marked as per applicable EU regulations. RoHS and REACH compliant. Certificates supplied with manufactured goods.

(\*) Phase noise figures are with internal reference ONLY. Phase noise with external reference are a function of such external reference, as such they may be better, worse or similar to the ones provided

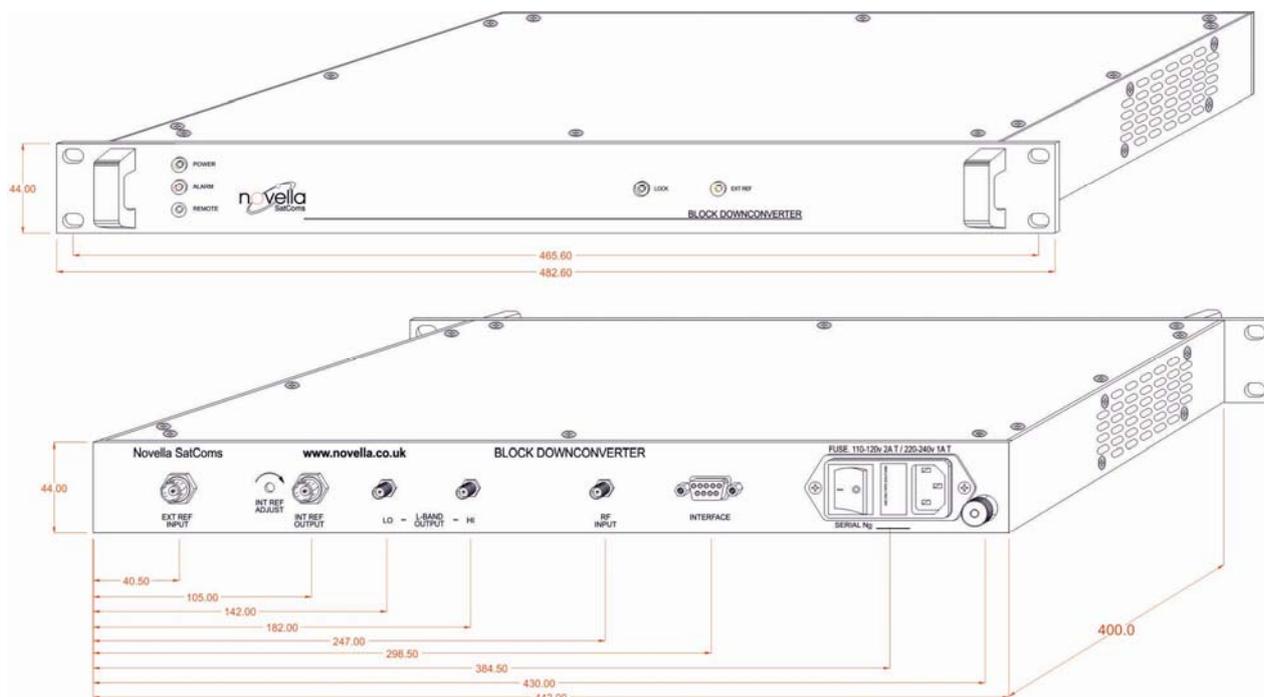
(\*\*) Equipment is not safe working under condensing humidity

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## FRONT AND REAR VIEW OF BD732



## BD732 CHASSIS DIMENSIONS



### Brief description

BD732 is a dual channel simple single conversion Block Downconverter. The full input band of 10.7 to 12.75GHz is notionally split in two sub-bands, LO (10.7 to 11.7GHz) and HI (11.7 to 12.75GHz) and each band is downconverted to, respectively 950 to 1,950MHz and 950 to 2,000MHz using two very low phase noise local oscillators (LO's) with frequencies 9.75 and 10.75GHz.

Both BDC's are simultaneously operational and together provide a translation from Ka-band receive to extended L-band.

The internal LO's are locked to an internal high stability OCXO (oven controlled crystal oscillator) which in turn may be locked to an outdoor 10MHz station standard.

Standard units have fixed gain of 25dB, units with remote interface have variable gain adjustable between 20 and 30dB.

Remote interface, when fitted is TCP/IP, SNMP compliant. A SNMP client software is required to interface to this unit. Alternatively a web browser may be used to monitor and control the unit. Only the gain may be controlled in this unit