



Model Number: 2445-N5N5

RF Engineering  
and Custom Build

# C-band / L-band Modular Block Down Converter Shelf

With hot-swap Norsat BDC Modules



Front View of Model 2445

This C-band / L-band (3.4 to 4.2GHz) Block Down Converter shelf comprises of up to 6 individual hot-swap C-band to L-band BDC's modules. The units use purpose specified Norsat BDC's (which have internal 10MHz reference – an external reference option is available).

This unit benefits from dual redundant power supplies for reliability in service, which can be visually monitored via front panel LEDs or via a dry contact alarm port on the rear panel.



Rear View of Model 2445

This unit is housed in a 3U 19" shelf, and is supplied with 50 ohm N-type connectors for each C-band input and 50 ohm N-type connectors for each L-band output.





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## Technical specifications and operating parameters

RF Parameters	
Input C-band Frequency Range	3.4 to 4.2GHz
Local Oscillator Frequency	5.150 GHz
IF output Frequency	950 – 1750 MHz
Reference Frequency	10MHz Internally Sourced
Signal Levels	
Input Signal Levels	-70 to -40 dBm typical
Max. Input Signal Level	-20 dBm Max Rating
Gain	
Conversion Gain	38 dB min -42 dB max
Gain Flatness per 27 MHz	± 0.5 dB
VSWR	
Input C-band Port	≤ 2.2:1
Output L-band Port	≤ 2.2:1
Noise, Linearity & Frequency Stability	
Noise Figure	10 < x < 15 dB
Output P1 dB min	5 dBm
Long Term Frequency Stability	± 25 KHz
Short Term Stability at 1KHz	- 75 dBc / Hz
Rejection / Isolation Levels	
In-band Spurious Levels	> 40 dBc
Image Rejection	> 35 dB

System Control	
Display	Front panel LED's for PSU status

Environmental	
Operating temperature	0 to 40°C
Location	Indoor use only
Storage temperature	-20°C to +75°C
Humidity	85% non-condensing

Power	
AC Power	85-264Vac 50/60Hz
LNB Power	None
PSU	Dual redundant
Hot-swap PSU	No

Physical	
Input connector	50Ω
Impedance	N-type
Output connector	50Ω
Impedance	N-type
Dimensions	3U high x 350mm deep x 19" wide
Colour	White 00-E-55 semi-gloss

Key Features	
Modular system accommodating Low, High, & extra high BDC modules	
Hot swap BDC modules	
Dual redundant power supplies	

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