

DIAMOND SERIES

MODEL 322 Ka-MULTIBAND nanoBUC™

- 40W + 80W PSAT
- GaN Technology
- 28 - 31 GHz
- Internal Lineariser
- Guaranteed Linear Power < 2dB Below PSAT
- Serial or Ethernet M & C



322 40/80W Ka-MULTIBAND nanoBUC

SPECIFICATIONS	80W Version 01-322E		40W Version 01-322D	
RF Frequency	28.0 to 31.0 GHz, in switchable bands			
IF Frequency	950 - 2000 MHz, user selectable			
Output Power (at 25°C)	80W (49 dBm) Psat, typical 50W (47 dBm) Plin ¹ , minimum		40W (46 dBm) Psat, typical 25W (44 dBm) Plin ¹ , minimum	
Gain	68 dB (typ)			
Gain Flatness	±0.5 dB (40 MHz Channel) at 25°C ±1.5 dB (per 1000 MHz Band) at 25°C			
Gain Variation	± 1.5 dB over -30 to +55°C, at 30GHz			
Input Connector	N(f)			
Input Return Loss	14 dB			
Output Connector	WR28 (UBR320 Flange)			
Output Return Loss	14 dB			
External Reference	10 MHz at 0 dBm ± 3 dB, via L-band Input			
Reference Phase Noise	1 kHz	-150 dBc/Hz		
Phase Noise	100 Hz 1 kHz 10 kHz 100 kHz 1 MHz	-65 dBc/Hz -75 dBc/Hz -85 dBc/Hz -95 dBc/Hz -115 dBc/Hz		
Output Spurious	Signal dependant, In-band, -60 dBc at Plin Signal dependant, Out-of-band, -20 dBm			
Tx Band Noise Density	-82 dBm/Hz			
Rx Band Noise Density	-140 dBm/Hz (up to 21.2 GHz)			
M&C Connector	D38999/20 FB35SN			
Monitor & Control	Options: RS485/422, or RS485/Ethernet <ul style="list-style-type: none"> Tx Mute (-60dBc) Gain Control +0/-31dB, 0.25dB step Output Power Detector Summary Alarm Over Temperature Protection 			
Power Connector	D38999/20 FE6PN			
Input Voltage	28VDC, per MIL-STD-704F			
Power Consumption	380W (typ) at Plin 550W (max) at Psat		200W (typ) at Plin 300W (max) at Psat	
Operating Temperature	-30 to +55°C			
Size	347L x 230W x 155H mm, including cowling and fans			
Weight	11 kg, including cowling and fans			

¹ Plin is Output Power with 3rd order IMD Products -25dBc relative to combined power of two tones; and Spectral Regrowth -30 dBc, at 1x symbol rate from the carrier, when driven with a QPSK signal at a symbol rate of 1 Mbps.