

**PRODUCT INFORMATION
& SPECIFICATIONS**

DIAMOND SERIES MODEL 322 KA-MULTIBAND NANOBUC

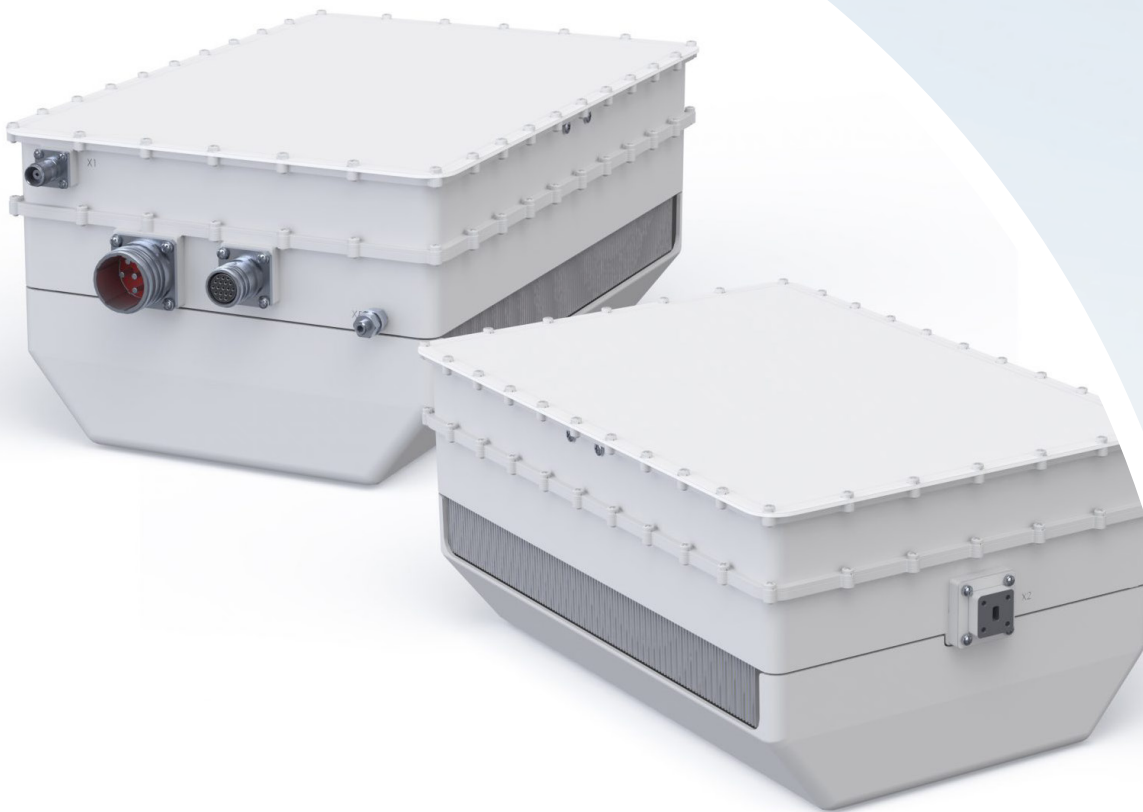
40W + 80W PSAT

GaN Technology

28 - 31 GHz

Internal Lineariser

Guaranteed Linear Power < 2dB Below PSAT



322 40/80W Ka-MULTIBAND nanoBUC

SPECIFICATIONS	80W Version 01-322E	40W Version 01-322D
FR 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 • 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	