

DIAMOND SERIES

MODEL 360 Ka-MULTIBAND nanoBUC™

- 16W + 25W PSAT
- GaN Technology
- 28 - 31 GHz
- Internal Lineariser
- Guaranteed Linear Power < 2dB Below PSAT
- Serial or Ethernet M & C



360 16/25W Ka-MULTIBAND nanoBUC

SPECIFICATIONS	25W Version 01-360A		16W Version 01-360B	
RF Frequency	28.0 to 31.0 GHz, in switchable bands			
IF Frequency	950-2000 MHz, user selectable			
Output Power (at 25°C)	25W (44 dBm) Psat, typical 15W (42 dBm) Plin ¹ , minimum		16W (42 dBm) Psat, typical 10W (40 dBm) Plin ¹ , minimum	
Gain	65 dB (typ) at 30GHz, 25°C			
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 (PBR320 Flange)			
Output Return Loss	14 dB			
External Reference	10 MHz at 0 dBm ± 3 dB, via L-band Input			
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	-60 dBc at Plin Signal dependant, Out-of-band, -20 dBm			
Tx Band Noise Density	-80 dBm/Hz			
Rx Band Noise Density	-140 dBm/Hz (up to 21.2 GHz)			
Monitor & Control	Options: RS485/422, or RS485/Ethernet - Gain Control +0/-31dB, 0.25dB step - Output Power Detector - Summary Alarm - Over Temperature Protection			
M & C Connector	MS27466T11F35S (Ethernet option in brackets)			
	PIN	Function	PIN	Function
	1	RS485+/ RS422 Tx+	8	GND/Tx Inhibit Return
	2	RS485- / RS422 Tx+	9	MUTE N/O (Ethernet Tx+)
	3	Reserved	10	MUTE COM (Ethernet Tx-)
	4	Alarm N/O	11	Reserved
	5	Alarm COM	12	RS422 Rx+ (Ethernet Rx+)
	6	Alarm N/C	13	RS422 Rx- (Ethernet Rx-)
	7	Tx Inhibit		
Power Connector	MS27466T13F04PA			
	PIN	Function	PIN	Function
	A	+V DC	C	DC Return
	B	+V DC	D	DC Return
Input Voltage	+18 to 50V DC, isolated			
Power Consumption	150W (typ) at Plin		100W (typ) at Plin	
Operating Temperature	-30 to +55°C			
Cooling System	2 x DC Brushless High Reliability Fans			
Size	180L x 100W x 150H mm			
Weight	3.5 kg			

¹ Plin is output power with spectral regrowth less than -25dBc, measured at 1.5 times the symbol rate from the carrier, when driven with a DVB-S2 waveform using 8PSK at a data rate of 1 Mbps. Psat and Plin reduce by 1dB between 30.5 and 31.0 GHz.