



GeosSat Microwave

- Output Frequency Range 27.5 - 31 GHz
- Input Frequency Range 950 to 2000 MHz
- LO frequency switchable 26.55 / 27.55 / 28.05 / 29.00 GHz
- M&C RS-485 / RS-232 / Ethernet (SNMP / HTTP)



20W Ka-band Universal GaN BUC

Model: GB20KAU

Section	Item	Specification
Band 1	RF (GHz)	27.5 - 28.5
	IF (MHz)	950 - 1950
	L.O (GHz), Switching	26.55
Band 2	RF (GHz)	28.5 - 29.5
	IF (MHz)	950 - 1700
	L.O (GHz), Switching	27.55
Band 3	RF (GHz)	28.5 - 29.5
	IF (MHz)	950 - 1950
	L.O (GHz), Switching	28.05
Band 4	RF (GHz)	30.0 - 31.0
	IF (MHz)	1000-2000
	L.O (GHz), Switching	29.00
Specifications	Input Frequency Range	950 to 2000 MHz
	LO frequency switchable	26.55 / 27.55 / 28.05 / 29.00 GHz
	M&C	RS-485 / RS-232 / Ethernet (SNMP / HTTP)
	Output Frequency Range	27.5 - 31 GHz
	LO frequency switchable	26.55 / 27.55 / 28.05 / 29.00 GHz
	Output Power @ Psat GaN	43 dBm -
	Linear Power @ -25dB IMD3	40 dBm -
	Linear gain	60 dB
	Gain Flatness (40 MHz BW)	± 1 dB max
	Gain Variation Over Temperature	± 2 dB max
	Phase Noise	< -75 dBc/Hz @ 1 kHz; < -85 dBc/Hz @ 10 kHz; < -95 dBc/Hz @ 100 kHz
Spurious @ Plinear	-60dBc max	

Section	Item	Specification
	Input Return Loss	>-15 dB
	IF Input / RF Output Interfaces	50 ohm N-type / WR28
	External / Internal Reference	10 MHz sine wave
	Ref Stability	± 1x 10E-7 (Minimum requirement)
	AC/ DC Voltage	90-250VAC / optional 36-60VDC /
	Power consumption	150W
	Operating Temperature/ Humidity	-40 °C to 55 °C / up to 98%
	Dimensions / Weight	120x120x200mm / 3.5kg

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Connector Pin Assignment

Connector Name	Type	Pin #	Signal	Parameter
J1 "IF IN"	N type female	N/A	IF Input 10 MHz Ref. IN (opt)	5 dBm, max -5 + 5 dBm
J2 "RF OUT"	WR-28	N/A	RF Output	45/47 dBm max
J3 "EXT POWER IN"	3100A-14S-7P	A, C	Line - AC / DC	90 - 240 VAC 36-60VDC
AC		B	Ground	
DC	PT02E14-12P			
J4 "M&C Interface"	PT02E12-10P 10 pin male	A	Rx+ In	RS-485
		B	Rx- In	
		C	Tx+ Out	
		D	Tx- Out	
		E	Detector	0 - 1V
		F	Alarm Out	Low when alarm
		G	GND	
		H	Mute In	Muted when Low
		J	Rx In	RS-232
		K	Tx Out	
J5 "M&C Interface"	Weatherproof RJ-45		Ethernet	Ethernet