



Block Up-Converter

Model: BUC-13G75-14G5-250-IP67

13.75-14.5GHz 250W CW, Output Power

Low power consumption, low phase noise and small size

Features:

- IF Frequency: 950~1700MHz.
- RF Frequency: 13.75-14.5GHz.
- Saturated output power: 250W.
- External Reference Adaptive.

Applications:

- Communication/Radar Systems
- Test Labs

Product Overview:

The BUC-13G75-14G5-250-IP67 is a block up-converter operating in the Ku-band. It features an integrated local oscillator, with input IF frequency of 950-1700 MHz and output RF frequency of 13.75-14.5GHz. Providing up to 250W of saturated output power.



Electrical Specifications at 25°C:

Parameter		Min	Typ	Max	Units
RF Frequency Range		13.75		14.5	GHz
Dual LO Frequency range			12.8 and 13.05		GHz
IF Frequency Range		950		1700	MHz
Output Power		250			W
Output P1dB		54			dBm
Gain		68	72		dB
LO leakage				-45	dBm
Spurious				-50	dBc
External Reference Input Frequency			10(sine wave)		MHz
External Reference Input Power		-5		+5	dBm
TX Gain Variation	@40MHz		±0.5		dB
	@full band		±1.8		
TX Gain Stability@temperature range			±1.5	±1.8	dB
Spectral Regrowth		-30(QPSK at 1.5x and OQPSK at 1.0x symbol rate off set with 2dB back-off from rated output power)			dBc
Phase Noise	@10Hz			-55	dBc/Hz
	@100Hz			-65	
	@1KHz			-75	
	@10KHz			-85	
	@100KHz			-95	
	@1MHz			-115	
Noise Power Density	@Transmit			-80	dBm/Hz
	@Receive			-125	
Noise Figure				15	dB
VSWR				1.5	:1
AC Supply Voltage		90		240	V AC
Power Consumption@Psat				1140	W



Mechanical Specifications:

Parameter	Value	Units
IF Connector	N type or F type	
Output Connector	WR-75	
M&C connectors	RS-232/485 / Ethernet / FSK	Optional
Ingress Protection Grade	IP-67	
Size	TBD	mm
Weight	8.5	Kg

Absolute Maximum Ratings:

Parameter	Value
RF Input Power	+5 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing:

Unit:mm; Tolerance:±0.1mm

COrdering Information:

Base Number	Description
BUC-13G75-14G5-250-IP67	Block Up-Converter, IF frequency range:950-1700MHz; RF output frequency range: 13.75-14.5GHz; 250W output power