

Model: TLBUC14G14.5G-43

The TLBUC14G14.5G-43 is a block up-converter operating in the Ku-band. It features an integrated local oscillator, with input IF frequency of 950~1450 MHz and output RF frequency of 14~14.5 GHz. Providing up to 20W of saturated output power, it also supports switchable functionality between internal and external references.

Features:

- IF Frequency: 950~1450 MHz.
- RF Frequency: 14~14.5 GHz.
- Saturated output power: 20W.
- External/Internal Reference Adaptive.

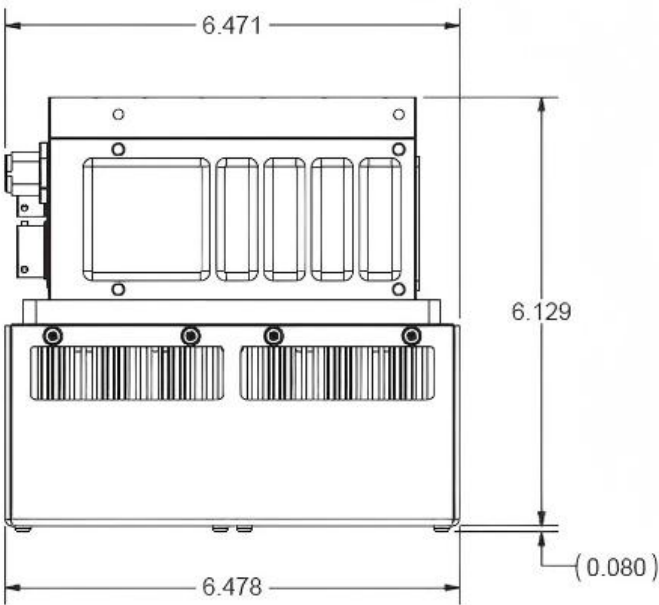
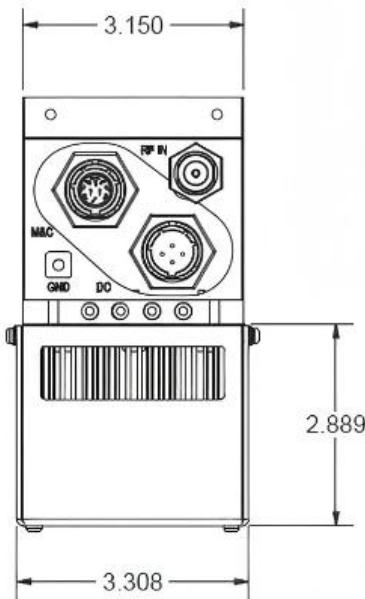
Electrical Specifications:

Parameter	Value	Units	Desc.
IF Input Freq.	950~1450	MHz	13.05GHz@LO
RF Output Freq.	14~14.5	GHz	
Output Power Psat	≥43	dBm	
Gain	≥65	dB	
Gain Flatness	≤±2	dB	
Phase Noise	≤-75@1KHz	dBc/Hz	
	≤-85@10KHz		
	≤-95@100KHz		
	≤-110@1MHz		
Output Spurious	≤ -60	dBc	In Band
	≤ -50	dBc	Out Of Band
Reference Mode	External/Internal Reference Adaptive		External reference with fallback to Internal ref.
External Reference Level	≥+5	dBm	Sine wave, 10MHz
Input VSWR	≤2:1		
Output VSWR	≤2:1		
DC Supply	+18~+24	V	
Communication Interface	RS485		
Ingress Protection (IP) Rating	IP65		
Temperature range	-30~65	°C	

Outline Drawing:



Unit:inch



Notes:
The dimensions of the module is yet to be determined.

Interface Table:

Type	Definition	Desc.
Waveguide WR75G	RF OUT	Straight
N Female	IF IN	50 ohm
M8 Female, 4 pin	Monitoring & Control 1 = DC Input 2 = A pos+ RS485 3 = B neg- RS485 4 = Common (GND)	1、 LO Frequency Setting 2、 Digital Attenuator Setting 3、 Internal/External Reference Status Query 4、 PLL Lock Status Monitoring 5、 DC Power Supply Status Monitoring
SMA	External Reference Input	10MHz

Note: The PLL frequency and the Digital Attenuator attenuation will be done by writing a number in the relevant register as per the communication protocol.

Ordering Information:

Part Number	Description	Revision
TLBUC14G14.5G-43	Block Up-converter , 14~14.5 GHz, Psat:20w	Rev.1.0

Notes:

1. Dimensions and specifications may be changed without prior notice.
2. Standard Warranty: three years.