

Block Up-Converter

50W Output Power

Model: TLBUC12.75G13.25G-50W

The TLBUC12.75G13.25G-50W 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 12.75 to 13.25 GHz. Providing up to 50W of saturated output power.

Features:

- IF Frequency: 950-1450MHz.
- RF Frequency: 12.75-13.25GHz.
- Saturated output power: 50W.

Applications:

- Communication/Radar Systems
- Test Labs

Electrical Characteristics:

Parameter		Min	Typ	Max	Units
RF Frequency Range		12.75		13.25	GHz
LO Frequency range			11.8		GHz
IF Frequency Range		950		1450	MHz
Output Power		50			W
Output P1dB			47		dBm
Gain			72		dB
Spurious	In Band			-60	dBc
	Out of Band			-50	dBc
External Reference Input Frequency			10(sine wave)		MHz
External Reference Input Power		-5		5	dBm
Gain Flatness	@54MHz			1.5	dB
	@full band		4		
Gain Flatness@temperature range			4		dB

Electrical Characteristics:

Parameter		Min	Typ	Max	Units
Phase Noise	@100Hz			-65	dBc/Hz
	@1KHz			-135	
	@10KHz			-140	
	@100KHz			-95	
VSWR				2	:1
DC Supply Voltage		36		60	V DC
Power Consumption@Psat				390	W

Mechanical Specifications:

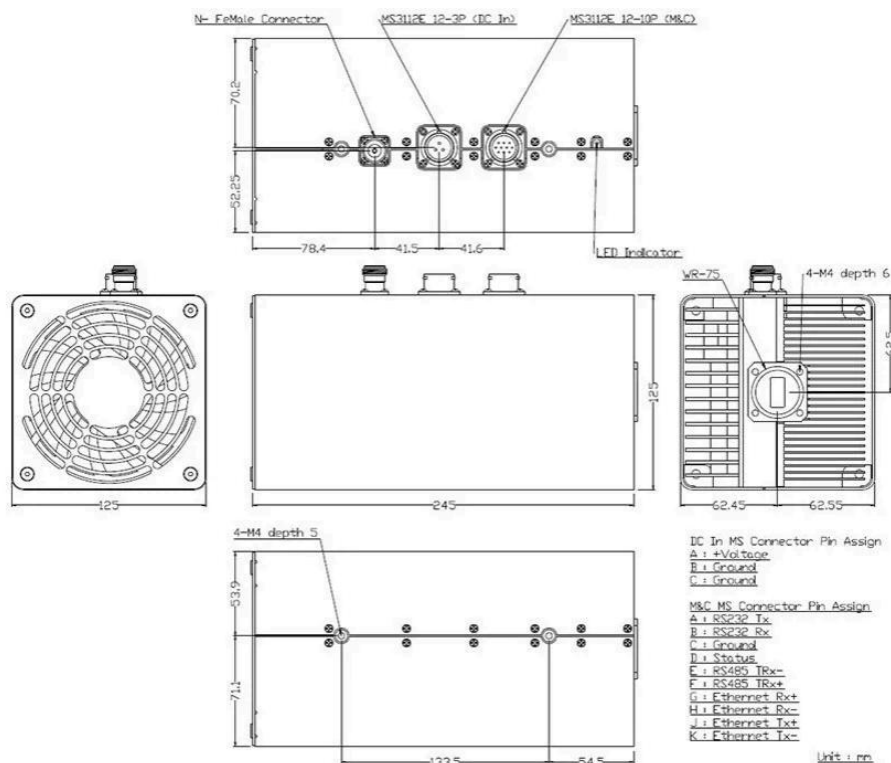
Parameter	Value	Units
IF Connector	N type	
M&C connectors	IP-55	
Ingress Protection Grade	245*125*125	mm
Size	4	Kg

Absolute Maximum Ratings:

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

Outline Drawing:

Unit:mm; Tolerance:±0.1mm



ESD Protection: Strictly adhere to ESD precautions to prevent electrostatic damage.

Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature	-40		+55	°C
Non-operating Temperature	-55		+85	°C
Relative humidity		95		%
Altitude		3,000		meters
Shock / Vibration(MIL-STD-810F)	10G rms (15 degree 2KHz) endurance			
Shock(non operating)	50G for 12msc half sin wave			

Ordering Information:

Base Number	Description	Revision
TLBUC12.75G13.25G-50W	Block Up-Converter, IF frequency range:950-1450MHz; RF output frequency range: 12.75-13.25GHz; 50W output power	Rev.1.0