

Block Up-Converter

25W Output Power

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

The TLBUC12.75G13.25G-25W 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 25W of saturated output power.

Features:

- IF Frequency: 950-1450MHz.
- RF Frequency: 12.75-13.25GHz.
- Saturated output power: 25W.

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		44.5			dBm
Output P1dB		44			dBm
Gain		65	70	75	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	@40MHz			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			-75	
	@10KHz			-85	
	@100KHz			-95	
VSWR				2	:1
DC Supply Voltage		36		60	V DC
Power Consumption@Psat				230	W

Mechanical Specifications:

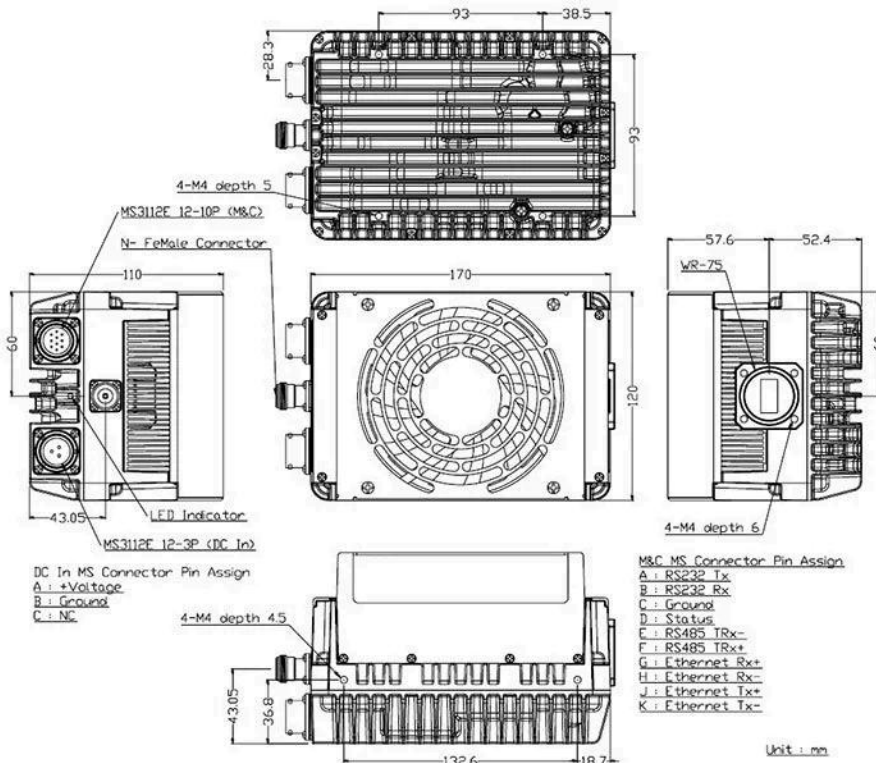
Parameter	Value	Units
IF Connector	N type	
M&C connectors	RS-485 & RS-232	
Ingress Protection Grade	IP-54	
Size	170*120*110	mm
Weight	2.37	Kg

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-25W	Block Up-Converter, IF frequency range:950-1450MHz; RF output frequency range: 12.75-13.25GHz; 25W output power	Rev.1.0