

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

电气特性 Electrical Characteristics:

参数 Parameter		Min	Typ	Max	单位 Units
RF频率范围 RF Frequency Range		12.75		13.25	GHz
LO频率范围 LO Frequency range			11.8		GHz
IF频率范围 IF Frequency Range		950		1450	MHz
输出功率 Output Power		44.5			dBm
线性输出功率 Output P1dB		44			dBm
增益 Gain		65	70	75	dB
杂散 Spurious	In Band			-60	dBc
	Out of Band			-50	dBc
外参考输入频率 External Reference Input Frequency			10(sine wave)		MHz
外参考输入功率 External Reference Input Power		-5		5	dBm
增益平坦度 Gain Flatness	@40MHz			1.5	dB
	@full band		4		
温度变化增益平坦度 Gain Flatness@temperature range			4		dB

电气特性 Electrical Characteristics:

参数 Parameter		Min	Typ	Max	单位 Units
相位噪声 Phase Noise	@100Hz			-65	dBc/Hz
	@1KHz			-75	
	@10KHz			-85	
	@100KHz			-95	
驻波 VSWR				2	:1
直流电压 DC Supply Voltage		36		60	V DC
功耗 Power Consumption@Psat				230	W

机械特性 Mechanical Specifications:

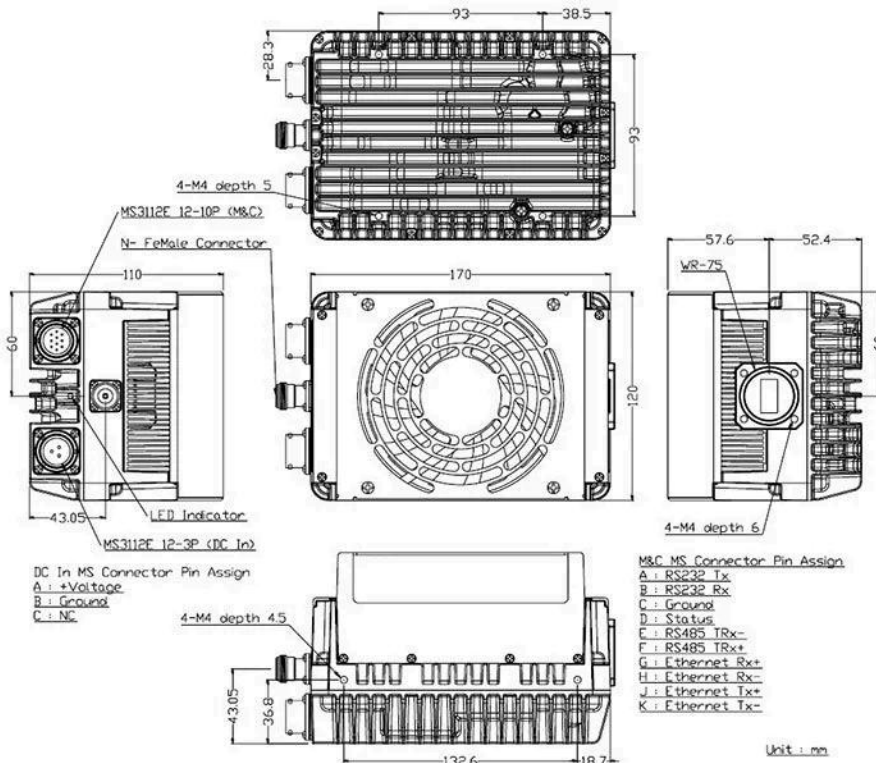
参数 Parameter	指标 Value	单位 Units
IF接口 IF Connector	N type	
监控&控制接口 M&C connectors	RS-485 & RS-232	
防护等级 Ingress Protection Grade	IP-54	
尺寸 Size	170*120*110	mm
重量 Weight	2.37	Kg

绝对最大值 Absolute Maximum Ratings:

参数 Parameter	指标 Value
IF输入功率 IF Input Power	+5 dBm
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V

外形尺寸 Outline Drawing:

Unit:mm; Tolerance:±0.1mm



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

温度环境 Environmental Conditions:

参数 Parameter	Min	Typ	Max	单位 Units
操作温度 Operating Temperature	-40		+55	°C
存储温度 Non-operating Temperature	-55		+85	°C
相对湿度 Relative humidity		95		%
海拔 Altitude		3,000		meters
震动 Shock / Vibration(MIL-STD-810F)		10G rms (15 degree 2KHz) endurance		
冲击 Shock(non operating)		50G for 12msc half sin wave		

订货信息 Ordering Information:

标准型号 Base Number	描述 Description	版本号 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