泰莱微波
Talent Microwave

Suzhou Talent Microwave,Inc
sales@talentmw.com
www.talentmw.com

Block Up-Converter

53dBm Output Power

Model: TLBUC27G32G-200W-IP65

The TLBUC27G32G-200W-IP65 is a block up-converter operating in the Ka-band. It features an integrated local oscillator, with input IF frequency of 950-1950 MHz and output RF frequency of 27-32 GHz. Providing up to 200W of saturated output power, it also supports switchable functionality between internal and external references.

Features:

- IF Frequency: 950~1950 MHz.
- RF Frequency: 27-32 GHz.
- Saturated output power: 200W.
- External/Internal Reference Adaptive.
- Protection:Input IF overdrive,over/under voltage, overTEM ,load VSWR protection

Applications:

- Communication/Radar Systems
- Test Labs

Electrical Characteristics:

Parameter		Min	Typ	Max	Units
IF Frequency Range		950		1950	MHz
IF Input Power			-2		dBm
IF to RF Gain			55		dB
RF Output Frequency Range		27		32	GHz
Output Power		53			dBm
Gain Adjustment Range		20			dB
Gain Adjustment Step			0.5		dB
Linear Gain Flatness			±3		dB
Spurious@Pout=53dBm				-55	dBc
Harmonics@Pout=53dBm				-55	dBc
Two-tone intermodulation (5MHz space)		-25 dBc max at total output power 50dBm			
Phase Noise	@100Hz			-70	dBc
	@1KHz			-85	
	@10KHz			-92	
	@100KHz			-105	
VSWR			1.5	2	:1
AC Supply Voltage @single-phase (50-60Hz)		180	220	260	V AC
Power Consumption@Psat				2.5	KW

Suzhou Talent Microwave,Inc
sales@talentmw.com
www.talentmw.com

Mechanical Specifications:

Parameter	Value	Units
RF Input/Output Connector	2.92mm Female/WR28	
M&C connectors	Serial:Y50X-1007; Ethernet: RJ-45	
AC power connector	Y50DX-1403	
Ingress Protection Grade	IP-65	
Size	300*214*400	mm
Weight	≤40	Kg

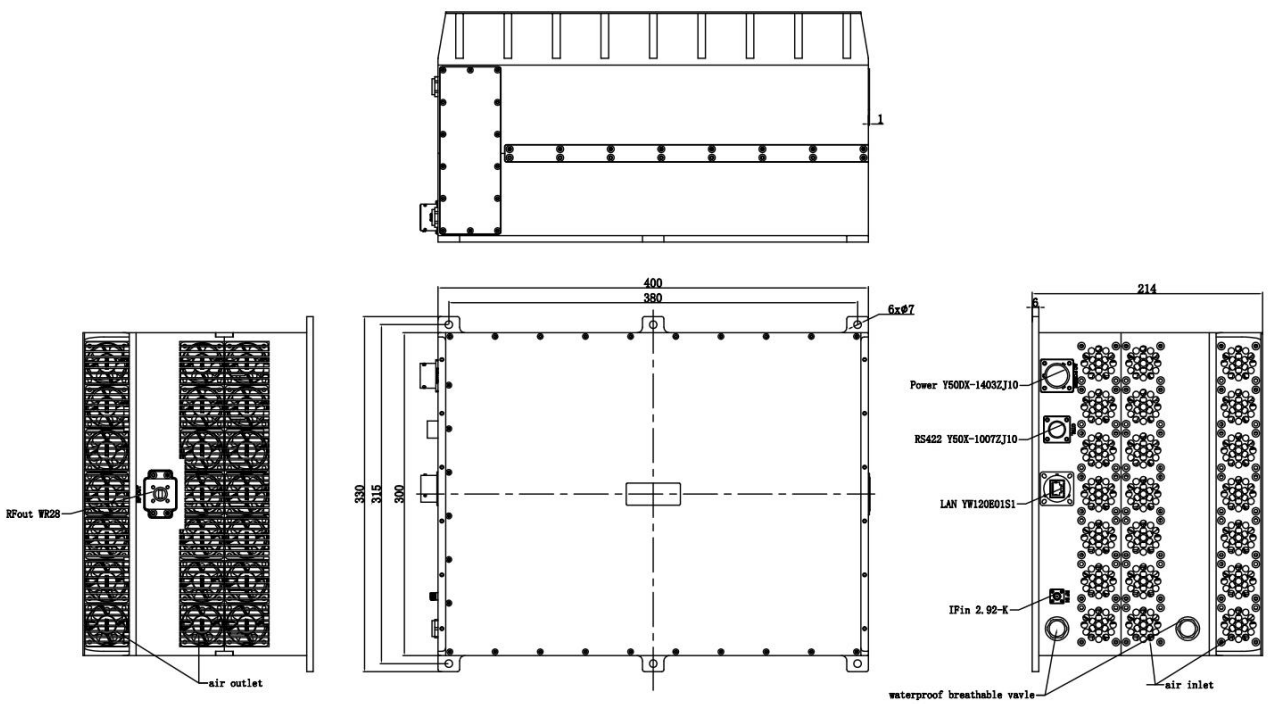
Absolute Maximum Ratings:

Parameter	Value
IF Input Power	+10 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing:

Unit:mm

Regulatory Compliance:



Suzhou Talent Microwave,Inc
sales@talentmw.com
www.talentmw.com

Key Features:

Parameter	Advantages
Protection functions	1,Over TEM:≥+65℃ shutdown 2,Over DC voltage:≥29V shutdown 3,Under DC voltage:≤20V shutdown 4,Input IF overdrive:≥10dBm shutdown 5,Load VSWR protection:The unit disables RF when reverse power exceeds the safe level of 3:1 VSWR or reduces power by 6dB
Monitoring functions	1,Input voltage 2,Input current 3,IF input power 4,Output VSWR 5,Output/reverse power 6,Status of gate voltages 7,Temperature
Cooling system	Built in Cooling system,forced air cooling

Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature	-20		+60	℃
Non-operating Temperature	-40		+70	℃
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
TLBUC27G32G-200W-IP65	Block Up-Converter, IF frequency range:950-1950MHz; RF output frequency range: 27-32GHz; 200W output power	Rev.1.1