

Power Source Specification

2450MHz/57dBm Psat

Model: TLS2450M-57-57-BC

TLS2450M-57-57-BC is a power source specification with a minimum Psat of 57 dBm at the 2450MHz frequency point. The power source specification features a built-in 380V power supply, making it easy to use in most lab environments. The RF output port is WR340.

Features:

- Frequency point: 2450MHz
- Output Power Psat: 57dBm Min
- Protection: Over TEM, over voltage, over current, load VSWR protection
- 50 Ohm Matched Input / Output

Applications:

- Cellular
- PCN
- GSM
- ISM
- Lab Test

Electrical Characteristics:

Parameter		Min	Typ	Max	Units
Frequency range			2450		MHz
Output Psat		57			dBm
Power Stability				±0.02	dB
ALC Range			30		dB
ALC Step	@300-500W range		10		W
	@50-300W range		5		
	@10-50W range		1		
	@1-10W range		0.5		
Spurious Suppression@Pout=60dBm		50			dBc
Harmonics Suppression@Pout=60dBm			20		dBc
Output VSWR			1.5		:1
Reference Signal		Internal			
Frequency Offset			±50		ppm

Electrical Characteristics:

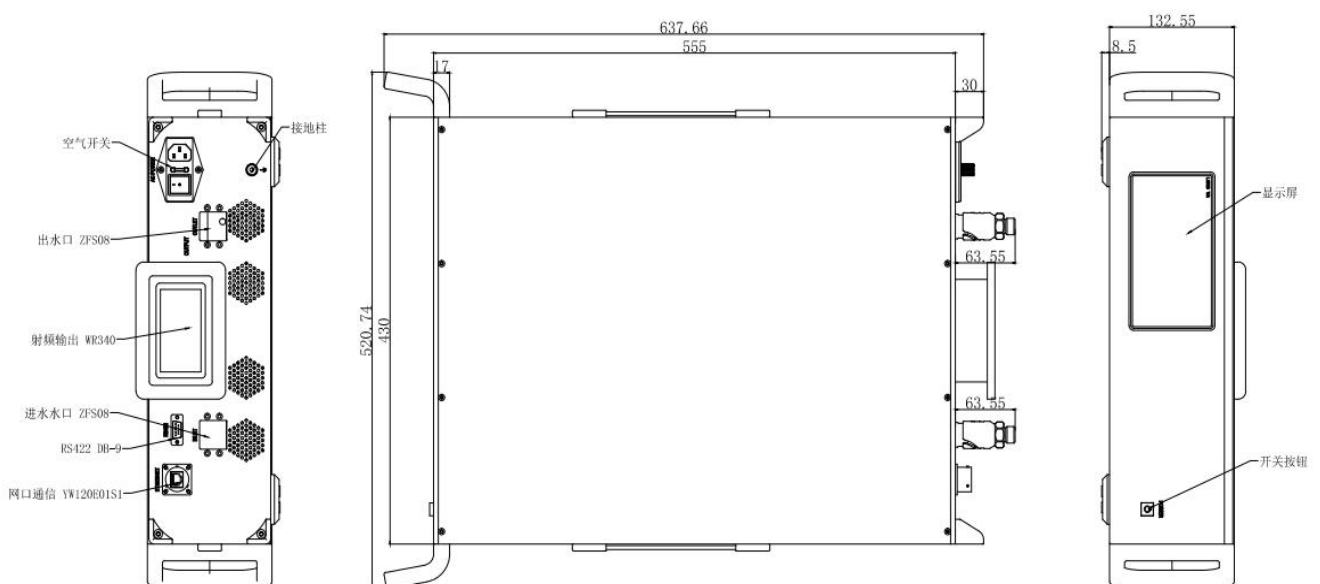
Parameter	Min	Typ	Max	Units
AC Voltage		220		V AC
Power Consumption		900		W
Power Source Specification Efficiency@Pout =60 dBm		60		%
Impedance		50		Ohms

Mechanical Specifications:

Parameter	Value	Units
RF Output Connector	WR340	
AC Supply Connector	220V/10A standard socket	
Communication Connector	DB9/RJ45	
Liquid Interfaces	Inlet/outlet:ZFS-08	
Size	19 Inch 3U*600 depth	mm
Weight	≤40	Kg

Outline Drawing:

Unit:mm; Tolerance:±0.1mm



Key Features:

Parameter	Advantages
Control functions	1, Power setting On/Off 2, ALC automatic level control 3, Gain control
Protection functions	1, Over TEM: $\geq +80^{\circ}\text{C}$ case temp shutdown $\geq +45^{\circ}\text{C}$ environment temp shutdown $\geq +40^{\circ}\text{C}$ Coolant temp shutdown 2, Over DC voltage: $\geq 110\%$ shutdown 3, Under DC voltage: $\leq 90\%$ shutdown 4, Load VSWR protection: The unit disables RF when reverse power exceeds the safe level of 3:1 VSWR or reduces power by 6dB
Remote control	RS422/LAN
Cooling system	Built in Cooling system, liquid cooling

Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature*	0		+40	$^{\circ}\text{C}$
Non-operating Temperature*	-10		+50	$^{\circ}\text{C}$
Relative humidity			95	%
Altitude	3,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave, 3 axis both directions			

*Note: For a wider temperature range, please consult the manufacturer.

Ordering Information:

Base Number	Description	Revision
TLS2450M-57-57-BC	Power Source Specification 2450MHz, Psat:57dBm, 220V AC, Built in liquid Cooling	Rev.1.0