

Power Source Specification

2450MHz/70dBm Psat

Model: TLS2450M-70-70-BC

TLS2450M-70-70-BC is a power source specification with a minimum Psat of 70 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: 70dBm Min
- Protection: Over TEM, over voltage, under voltage, load VSWR, chip damage protection
- 50 Ohm Matched Input / Output

Applications:

- Cellular
- PCN
- GSM
- ISM
- Lab Test

Electrical Characteristics:

Parameter		Min	Typ	Max	Units
Frequency range			2450		MHz
Frequency error			±50		ppm
Output Psat		70			dBm
Power stability@24h				±0.2	dB
ALC Range			20		dB
ALC Step	@50~300W range		5		W
	@0.3~1KW range		10		
	@1~5KW range		20		
	@5~10KW range		50		
Phase Adjustment Range			360		°
Phase Adjustment Step			5.625		°
Output VSWR			2		:1
AC Voltage			380	420	V AC
AC Efficiency @Pout =60 dBm			60		%
Power source Efficiency@Pout =60 dBm			56		%
Impedance			50		Ohms

Mechanical Specifications:

Parameter	Value	Units
TLS2450M-70-70-BC		
Output Connector	WR340	
M&C connectors	Serial:DB9 Ethernet: RJ-45	
Power Supply Connector	Y50DX-3204*5	
Liquid Interfaces	G-1/2	Coolant temp range:15~30°C Pressure: 1.5 bar Liquid flow: 50L/min
Size	600*500*229	mm
Weight	≤52	Kg

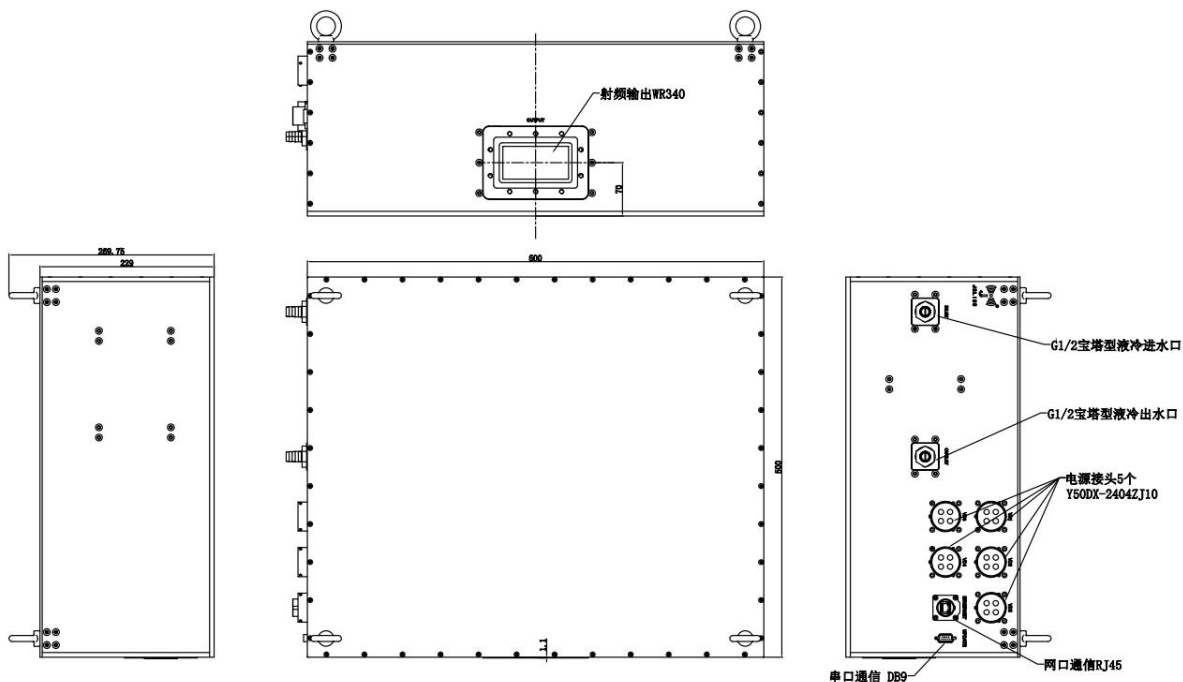
AC/DC		
AC Connector	380V:Y50DX-3205	
DC Connector	Y50DX-3204*5	
Control Connector	RS422 Serial:DB9 Ethernet: RJ-45	
Front Panel LCD Screen Display	7 inch LCD Screen Display	
Size	19 Inch 6U*800 depth	mm
Weight	≤60	Kg

Key Features:

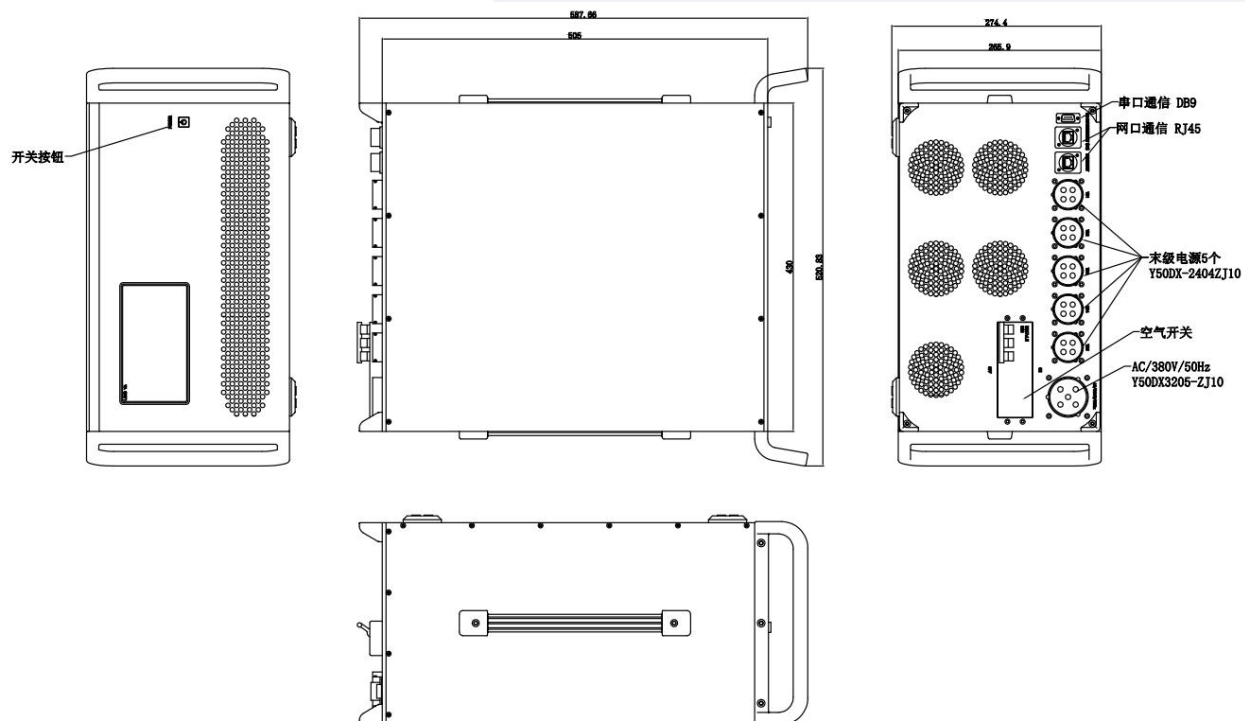
Parameter	Advantages
Protection functions	1, Over TEM: ≥+80°C case temp –shutdown ≥+55°C environment temp –shutdown ≥+40°C Coolant temp –shutdown 2, Over voltage: ≥110% DC voltage supply-shutdown 3, Under voltage: ≤90% DC voltage supply-shutdown 4, Load VSWR protection:The unit disables RF when reverse power exceeds the safe level of 3:1 VSWR or reduces power by 6dB. 5, Chip damage: ≤2 pieces warning (without short-circuit) ≥3 pieces or short-circuit–shutdown
Remote control	RS422/LAN
Control&monitor functions	1, Chip-level: status of each chip(gate voltage, drain current, output power, case-temp); 2, System-level: output power, reverse power, load VSWR, DC voltage, DC current, environment temp, Coolant temp, PLL status
Cooling system	Built in Cooling system,forced liquid cooling

Outline Drawing:

Unit:mm; Tolerance:±0.1mm



TLS2450M-70-70-BC



AC/DC

Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature*	5		+40	°C
Non-operating Temperature*	-20		+70	°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-70-70-BC	Power Source Specification 2450MHz, Psat:70dBm,380V AC,Built in liquid Cooling	Rev.1.0