HPORTEK

PRODUCT DATASHEET

SYPA-500W250M

CW Solid-State Power Amplifier

The SYPA-500 W is a solid-state, air-cooled wideband power amplifier for applications requiring wide instantaneous bandwidth, high gain, and linearity. It can be rack-mounted in a 19-inch standard cabinet or used as a bench-top instrument. It delivers at least 500 W of RF output power. The operator can adjust gain via the front panel. When RF input exceeds 0 dBm, the LNA power is shut off for protection. Over-temperature conditions trigger power-down to protect the amplifier. It features a color LCD touchscreen and physical buttons, displaying operational and fault status. Local and remote control are available via GPIB, USB, and Ethernet.



Features

• 500W, CW, high power 500W、

• 10kHz–250MHz wideband 10kHz ~ 250MHz

• Class A amplifier A

• Portable bench-top instrument

• High efficiency

• Modular design

Published technical information

Parameter	Specification / typical value
Functional Specifications	
Remote Control	Supported
Power Display	Supported
Adjustable Gain	Supported
Internal Leveling	Supported

Parameter	Specification / typical value
Protection	Input overload, VSWR and over-temperature protection supported
Operating Mode	Supports AM, FM, PM; pulse modulation mode and CW mode
Performance Specifications	
Operating Frequency	10kHz ~ 250MHz
Output Power	≥500W
Max. Input Power	1.0mW
Output P3dB	≥475W
Output P1dB	≥375W
Flatness	≤±1.5dB
Gain	≥58dB
Gain Adjustment Range	≥25dB
Power Display Accuracy	≤±0.3dB
Harmonic Suppression	≥20dBc
General Specifications	
Power Supply	Voltage 220 V ± 10%, frequency 50 Hz ± 5%
Dimensions	426 mm × 223 mm × 640 mm (W × H × D)
Weight	≤45kg
Operating Temperature	0℃ ~ +40℃
Storage Temperature	-40℃ ~ +70℃

Prepared from the existing product catalogue. Specifications may change; typical values are not guaranteed limits. Confirm operating conditions, interfaces and ordering configuration with engineering. This document does not replace the equipment operating manual.

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https://www.hportek.com/en/product/emc-rf-power-amplifier-sypa-500w250m/