AMV

0~±20kV
0~400W
HIGH VOLTAGE AMPLIFIER
FOUR QUADRANT HIGH
VOLTAGE POWER SUPPLY

wisman®
High voltage power supply
威思曼高压电源

ISO9001:2015

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HIGH VOLTAGE AMPLIFIER FOUR QUADRANT HIGH VOLTAGE POWER SUPPLY

- OUTPUT VOLTAGE 0~±20kVdc or PEAK Ac
- OUTPUT CURRENT 0~±20mAdc or PEAK Ac
- SLEW RATE 800V/μs
- SIGNAL BAND WIDTH：DC to 5.2kHZ
- DC VOLTAGE GAIN：2000V/V
- IN-PHASE PROPORTIONAL AMPLIFIER
- FOUR QUADRANT OUTPUT DRIVES EITHER CAPACITIVE OR RESISTIVE LOADS
- CLOSEDLOOPSYSTEM,LOWNOISE,HIGHPRECISION
- WITH SHORT CIRCUIT PROTECTION FUNCTION
- CAN BE USED AS DC POWER SUPPLY

INTRODUCTION

Wisman AMV series is a high stability, high power high voltage amplifier power supply for industrial and scientific applications. AMW is a solid state design with high reversal rate, wide bandwidth and low noise. Four quadrant power supply, suitable for reactive or resistive load. AMV is an in-phase amplifier with an amplification factor of 2000. Prevents overvoltage or overcurrent caused by short circuit of active load or output to ground. Precision voltage and current display monitors high voltage output and load current.

TYPICAL APPLICATIONS

Media research, electron beam and ion source, electrostatic monitoring (including ion beam control), spark controller , electrostatic suspension, high voltage cable test and high pressure component testing, research, including dielectric barrier discharge plasma electrostatic deflection, electrophoresis, electrorheological fluids, electro-optic modulation, polarization of materials, ac or dc bias ion beam steering, particle accelerators, mass spectrometer, materials characterization , ferroelectric, atmospheric plasma, piezoelectric ceramics, dielectric barrier discharge.

FEATURES

Parameter		Instructions
Input		220Vac±10%, Max current 5A, (110Vac optional, Max current 10A).
Output voltage		0 to ±20 kV DC or peak AC
Output current		0 to ±20 mA DC or 60mA peak Ac for 1 ms(mustn't exceed 20mA rms)
temperature coefficient		≤25ppm/℃。
Output voltage control		0 to ±10 V DC or peak AC,Zin=25kΩ
Dc voltage gain		2000V/V
Dc voltage gain accuracy		＜0.1%
Dc offset voltage		＜±2V
Output voise		＜1.5Vrms
Slew rate		>800V/us(Typical values,10%~90%)
Large signal bandwidth (-3dB)		DC to 5.2kHZ
Large signal bandwidth (1% distortion)		DC to 20kHZ
Small signal bandwidth (-3dB)		DC to 20kHZ
Stability		< 50ppm/hr, no accumulation
Temperature drift		＜25ppm
Volatge monitor		Monitor proportion:1:2000；precision:＜±0.1%；offset voltage:＜±2mV；noise:＜10mVrms；Zout=47Ω
Current monitor		Monitor proportion:0.5V/mA；precision:＜±0.1%；offset voltage:＜±10mV；noise:＜10mVrms；Zout=47Ω
HV ON/OFF	Local	Unique tap switch.
	Remote	TTL is high (or hanging) when high voltage off, TTL is low when the high voltage on
Dynamic Adjistment		The potentiometer is used to optimize the AC response under different loads
Current limit/Trip		Toggle switches to select current limit or trip, potentiometers are used to set limit or trip current, from 0 to 60 mA

Sales@wismanhv.com
www.wismanhv.com

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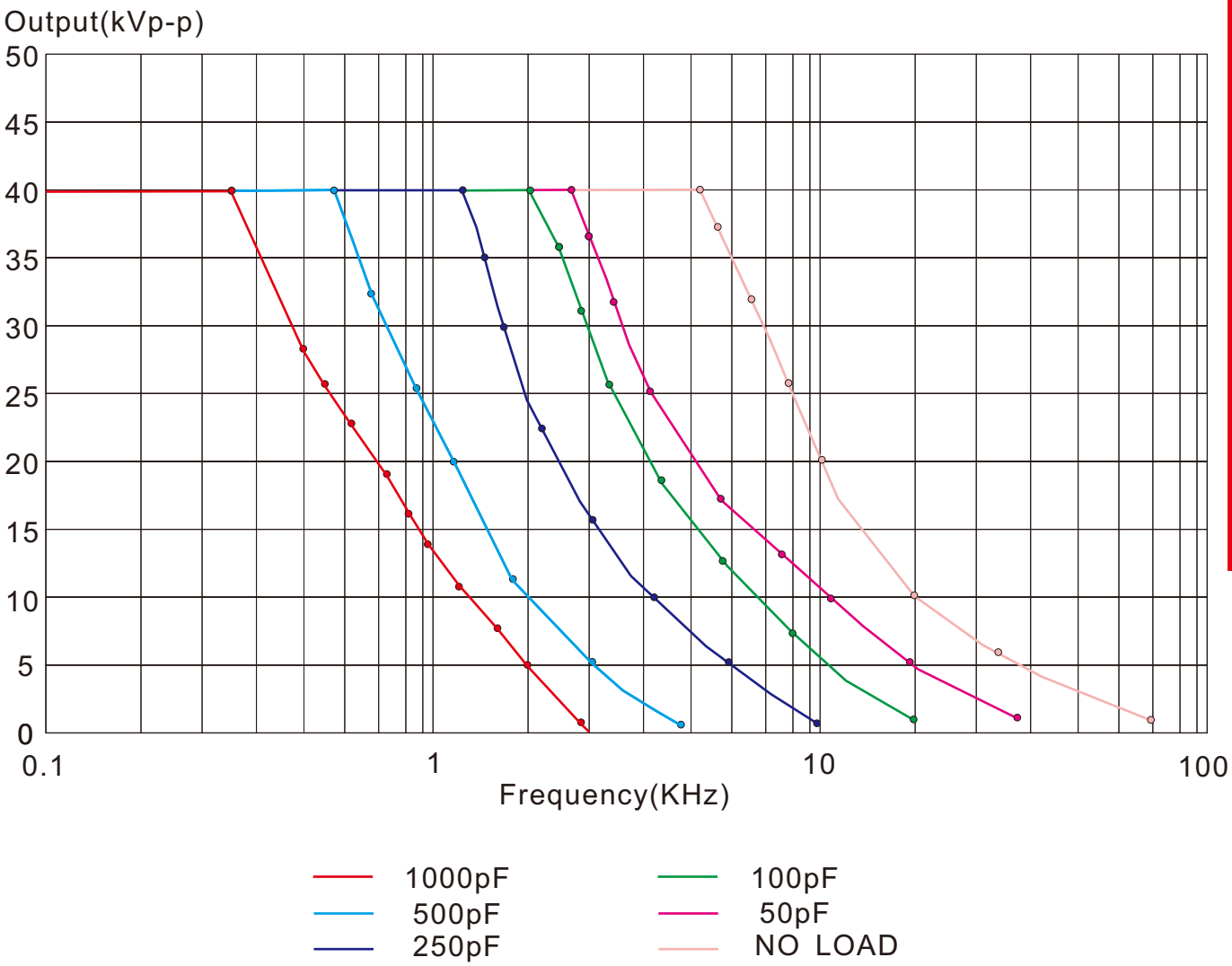
FEATURES

Parameter	Instructions
Out of Regulation Status	When the power supply cannot produce the desired high voltage output (such as in the case of overcurrent limit), the display will be on and the output will be a low TTL level
Limit/Ttrip status	When the high voltage is off, due to the output current exceeds the current set value and trip, the indicator is on TTL low level to detect the high voltage output fault
Overall dimensions	264mm×483mm×635mm(10.4X19x25)
Weight	25kg
High voltage connector	Wisman standard CA30 connector with cable
BNC connector	Amplifier Input, Voltage Monitor, Current Monitor, Remote High Voltage ON/OFF, Out of Regulation Status , Fault/Trip Status

OUTPUT CHARACTERISTIC CURVE



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HIGH VOLTAGE AMPLIFIER FOURQUADRANT HIGHVOLTAGE POWER SUPPLY

Overall dimensions：mm[inch]