AMX

0~±30kV
0~600W
FOUR QUADRANT HVPS
PRECISION HV AMPLIFIER

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

ISO9001:2015

HIGH VOLTAGE AMPLIFIER

- OUTPUT VOLTAGE RANGE: 0~±30KVDC or PEAK AC
- OUTPUT CURRENT 0~±20mADC or PEAK AC
- SLEW RATE: >35V/US
- LARGE SIGNAL BANDWIDTH: DC>2.5kHZ
- DC VOLTAGE GAIN: 3000V/V
- IN-PHASE RATIO AMPLIFIER
- FOUR QUADRANT OUTPUT DRIVES EITHER CAPACITIVE OR RESISTIVE LOADS
- CLOSED LOOP SYSTEM, LOW NOISE, HIGH PRECISION
- SHORT CIRCUIT PROTECTION FUNCTION
- CAN BE USED AS DC POWER SUPPLY

INTRODUCTION

Wisman AMX series is a high stability, high power high voltage amplifier for industrial and scientific applications. AMX30R600, output voltage ±30KV, output current 20mA, high voltage power amplifier launched by Wisman high voltage power supply, Wisman high voltage power supply for industrial and research applications. All solid state high voltage insulation design, can achieve high conversion rate, wide band and low noise work. Four-quadrant active output absorbs or outputs current to a resistive or resistive load over the entire output voltage range. The type of high voltage amplifier output introduced by the Wisman High voltage power supply is essential to achieve accurate output response and the high conversion rates required for various loads, such as highly capacitive or reactive loads. Change the amplifier to a phase-in amplifier.

APPLICATIONS

Dielectric elastomer, soft robot, HASEL actuator (artificial muscle), electroactive polymer (EAP), ionic conductive polymer gel film (ICPF), pneumatic artificial muscle (PAM), electroviscous fluid (ER fluid), magnetorheological fluid (MR Liquid), ferroelectric tester, Piezoelectric Drive and Control, Laser modulation, semiconductor research, electrostatic deflection, electrorheological fluid, AC or DC Bias, Particle Accelerators, Mass Spectrometers, Material Characterization, ferroelectric, Atmospheric Plasma, Dielectric barrier discharge, dielectric barrier discharge (DBD), DBD plasma actuator, atmospheric plasma, corona discharge, electrostatic suspension furnace (ELF), electrostatic Haptic Display, Water tree, dielectric breakdown testing, ion beam deflection, electron beam deflection, electrophoresis, dielectric electrophoresis (DEP), flash sintering, material polarization, ion engine, particle accelerator, material characterization, electrostatic actuator, electrostatic spinning, electrostatic spraying, electrostatic coating, solar panel (photovoltaic cell) testing, Langmuir Probe, electro-optical tuning Manufacturing, electrophotography, corona generator, Scorotron grid consumables, main charging roller (PCR), developing roller, corona charging supplies, photosensitive drum charging, electrostatic suction cup, electrostatic deflection of charged particle beam, 3D printing (application of electro-hydraulic power (EHD) technology), etc.

SELECTION EXAMPLE

AMX	30	*	600
Series Number	Maximum Output Voltage (KV)	Output Polarity P:Positive N:Negative R:Reversible	Maximum Output Power (W)

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SPECIFICATION

PARAMETER	DESCRIPTION
Input	220Vac±10%，Max current10A。
Output Voltage	0 to ±30 kV DC or peak
Output Current	0 to ±20mA DC or peak AC
Output Voltage Control	0 to ±10 V DC or peak AC,Zin=25kΩ
Dc Voltage Gain	3000V/V
Dc Voltage Gain Accuracy	＜0.1%。
Dc Offset Voltage	＜±4V
Output Noise	＜1.5Vrms
Slew Rate	>550V/us(Typical values,10%~90%)
Large Signal Band Width(-3dB)V	DC>2.5kHZ
Large Signal Band Width（-3db）	DC to 30kHZ
Stability	＜50ppm/hr，noncumulative
Temperature Coefficient	≤25ppm/℃。
Voltage Monitor	Monitor ratio:3000:1；precision:＜±0.1%；offset voltage:＜±5mV；noise:＜20mVrms；Zout=47Ω
Current Monitor	Monitor ratio:1V/6mA；precision:＜±0.5%；offset voltage:＜±10mV；noise:＜30mVrms；Zout=47Ω
Operating Temperature and Humidity	0~40℃,0~85%，No Condensation
Overall Dimensions	1040mm H x 430 mm W x 870 mm(41" H x 17" W x 34" D)。
Weight	70kg

AMX ANALOG INTERFACE(OPTIONAL)

J2	Singal	Parameter
1	Vmon，voltage monitor	0~±10Vdc=0~100%Rated output, Zout=47W
2	GND	Connect chassis ground
3	N/C	N/C
4	N/C	N/C
5	+12Vdc	+12Vdc output
6	+12Vdc interlock	+12Vdc closed,connect with pin 5,no interlock
7	GND	GND
8	N/C	N/C
9	Program return GND	Program return GND
10	Vp-in,Voltage program	0~±10Vdc=0~100%rated output, Zin=25kW
11	N/C	N/C
12	N/C	N/C
13	N/C	N/C
14	N/C	N/C
15	N/C	N/C
16	N/C	N/C
17	Enable	High=On
18	N/C	N/C
19	N/C	N/C
20	N/C	N/C
21	GND	GND
22	Remote off ground	Remote off ground
23	Remote=turn off	Remote turn off, connect with pin 22, Relieve turn off
24	N/C	N/C
25	GND	GND

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