



ISO9001:2015

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- OUTPUT CURRENT 0~±80mAdc or PEAK AC
- REVERSE RATE 1000V/µs
- SIGNAL BANDWIDTH: DC to 60kHZ
- DC VOLTAGE GAIN: 500V/V
- IN-PHASE PROPORTIONAL AMPLIFIER
- FOUR-QUADRANT OUTPUT FOR DRIVING CAPACITIVE LOAD
- CLOSED-LOOP SYSTEM, LOW NOISE, HIGH ACCURACY
- SHORT CIRCUIT PROTECTION FUNCTION
- CAN BE USED as DC POWER SUPPLY



INTRODUCTION

Wisman AMK series is a high stability, high power high voltage amplifier power supply for industrial and scientific applications. AMK series is a solid state design with high slew rate, wide bandwidth and low noise. Four quadrant power supply, suitable for reactive or resistive load. AMK is an in-phase amplifier with an amplification factor of 1000. AWK revents overvoltage or overcurrent caused by short circuit of active load or output to ground. Precision voltage and current can be closed loop monitoring of high voltage output and load current feedback signals.

TYPICAL APPLICATION

Electrostatic deflection, Electrophoresis, Electrorheological fluids, Electro-optic modulation, Material poling, AC or DC biasing, Ion beamsteering, Particle accelerators, Mass spectrometers, Material characterization, Ferroelectrics, Atmospheric plasma, Dielectric barrier discharge

SPECIFICATIONS

PARAMETER		DESCRIPTION
Input		220Vac±10%, max current 5A, (110Vac optional, Max current 10A).
Output voltage		0 to ± 5 kV DC or peak AC
Output current		0 to \pm 80 mADC or 120mApeak AC(
Output voltage controller		0 to \pm 10 V DC orpeak AC,Zin=25k Ω
DC Voltage Gain		500V/V
Acurracy of DC voltage		<0.1%。
DC offset voltage		$<\pm 2V$
Output noise		<0.5Vrms
Slew rate		>1000V/us(typical, 10%~90%)
Large singnal bandwidth (-3db)		DC to 60kHZ
Large signal bandwidth		DC to 50kHZ
(1% distortion)		
Small signal bandwidth (-3db)		DC to 75kHZ
Stability		<50ppm/hr, noncumulative
Temperature coefficient		≤25ppm/℃ 。
Voltage monitor		Ratio:1:500; Accuracy: $<\pm0.1\%$; Offset voltage: $<\pm2$ mV; Noise: <10 mVrms; Zout= 47Ω
Current monitor		Ratio: 1V/8mA; Accuracy: $<\pm$ 0.1%; Offset voltage: $<\pm$ 10mV; Noise: $<$ 10mVrms; Zout=47 Ω
HV ON/OFF	Local	Individual push-button switch
	Remote	TTL high (oropen) turns offhigh-voltage output. TTL lowturns on high-voltage output.
Dynamic Adjustment		Panel potentiometer is used tooptimize the ACresponse for various load parameters.
Current limit/Trip		Switch selectable for either limitor trip. Potentiometer is used to adjust limit or triplevel from 0 to $\pm 80~\text{mA}$



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PARAMETER	DESCRIPTION
Out of Regulation Status	Illuminates and a TTL lowis provided when unit fails to produce required HV output such as during current limit or short circuit load conditions
Limit/Trip status	Illuminates and a TTL lowis provided when the high-voltage output is disabled due to the output current exceeding the current trip level, the detection of a high-voltage supply fault or the removal of the top cover
Dimensions	264mm×483mm×635mm(10.4X19x25.)
Weight	25kg
HV connector	Wisman standard CA 30 connector with cable
BNC connector	Amplifier Input, Voltage Monitor, Current Monitor, Remote High Voltage ON/OFF, Out of Regulation Status, Fault/Trip Status

DIMENSIONS: mm[inch]



