

## **SPECIFICATIONS**

## Programmable DC Power Supply

MODEL: OPS-3002



Parameter			Specifications	
Voltage			0 to 300V	
Output rating(@0 C ~ 40 C)	utput rating(@0°C ~ 40°C)		0 to 2A	
Output WATT			600W	
Programming Accuracy	rogramming Accuracy Voltage		0.05%+100.0mV	
(@25℃ ±5℃)±(%of output + offset)	Current		0.2%+2.0mA	
Readback Accuracy	Voltage		0.05%+50.0mV	
(@25℃ ±5℃)±(%of output + offset)	Current		0.2%+1.0mA	
Ripple and Noise(20Hz to 20MHz)	Voltage		≤ 0.01%mVrms	
hippie and Noise(20Hz to 20MHz)	Current		≤ 2mArms	
Load Regulation	Voltage		20.0mV	
Load Hegulation	Current		0.2mA	
Line Regulation	Voltage		5.0mV	
Line riogalation	Current		0.2mA	
Resolution	Programming/Readback		≤2.50mV / ≤0.02mA	
	Display Meter		10mV / 0.1mA	
Temperature Coefficient $\pm$ (%of output + offset			0.05%+30.0mV	
After a 30-minute warm-up	Current		0.2%+1.0mA	
Stability ±(%of output + offset)	Voltage		0.05%+10.0mV	
After a 1 hour warm-up	Current		0.2%+0.4mA	
Transient Response Time		Less than 50 ps for output to recover to within 15mV following a change in output current from full load to half load or vice versa		
Voltage Programming Speed	No load	Rising time	≤ 7.5V/ms	
	NO IOau	Falling time	≤ 3V/ms	
	Half load	Rising time	≤ 3.25V/ms	
	Tidii lodd	Falling time	≤ 6V/ms	
Remote Sensing Capability	Voltage Drop		Up to 1V per each lead	
	Load Regulation		Add 5 mV to spec for each 1-volt change in the + output lead due to load current changes	
	Load Voltage		Subtract voltage drop in load leads from specified output voltage ratiing.	
	OVP		5% + 0.5V	
OVP and OCP Accuracy $\pm$ (%of output + offset			5% + 0.5V	
	Activation Time		< 80ms when maximum output rati	-
Output Voltage Overshoot & Undershoot	Power Switch ON/OFF		No overshoot, undershoot : ≤ -0.8V	
· · · ·	Voltage Output Setting		No overshoot, No undershoot	
Remote Interface		GPIB(IEEE-488.2) Option , RS232C Standard		
Programming Language			SCPI(Standard Commands for Programmable Instruments)	
Command Processing Time(average)	Apply Output Setting		Setting	20ms
			Query	32ms
			Voltage & Current Setting	15ms
			Voltage & Current Query	32ms
	Measureme	ent	Voltage & Current Query	32ms
	The Other		Setting & Query	< 35ms
State Storage Memory		Ten user-configurable(voltage,current,OVP & OCP level)stored states		
Cycling Mode	Step(Voltage,Current, Slope & Delay time)		Maximum 100 steps	
	Slope time		0sec ~ 86,400sec (24 hours)	
	Delay time		100ms ~ 86,400sec(24 hours)	
	<del>' '                                  </del>		Maximum 15milion times	
Operation Temperature		0°C ~ 40°C for full rated output. At higher temperatures the output current is derated linearly to 50% at 55°C maximum temperature		
Operation Temperature			, , , , , , , , , , , , , , , , , , ,	
Operation Temperature Cooling			Isolation AC FAN	
	sis ground)		Isolation AC FAN	g conductors without insulation to the (+)output to the e (-)sense terminals
Cooling	sis ground)		Isolation AC FAN ±60 Vdc when connecting shorting	
Cooling Output Terminal Isolated (maximum, from chas			Isolation AC FAN ±60 Vdc when connecting shorting (+)sense and the (-)output and the	
Cooling Output Terminal Isolated (maximum, from chas			Isolation AC FAN ±60 Vdc when connecting shorting (+)sense and the (-)output and the 220V ± 10% 50~60Hz	
Cooling Output Terminal Isolated (maximum, from chas	Standard		Isolation AC FAN ±60 Vdc when connecting shorting (+)sense and the (-)output and the 220V ± 10% 50~60Hz 110V ± 10% 50~60Hz	
Cooling Output Terminal Isolated (maximum, from chas AC Input Ratings	Standard		Isolation AC FAN  ±60 Vdc when connecting shorting (+)sense and the (-)output and the  220V ± 10% 50~60Hz  110V ± 10% 50~60Hz  115V ± 10% 50~60Hz	
Cooling Output Terminal Isolated (maximum, from chas	Standard Option	nded	Isolation AC FAN  ±60 Vdc when connecting shorting (+)sense and the (-)output and the  220V ± 10% 50~60Hz  110V ± 10% 50~60Hz  115V ± 10% 50~60Hz  230V ± 10% 50~60Hz	
Cooling Output Terminal Isolated (maximum, from chas AC Input Ratings	Standard Option Precision	nded	Isolation AC FAN  ±60 Vdc when connecting shorting (+)sense and the (-)output and the 220V ± 10% 50~60Hz  110V ± 10% 50~60Hz  115V ± 10% 50~60Hz  230V ± 10% 50~60Hz  6 month	e (-)sense terminals
Cooling Output Terminal Isolated (maximum, from chas AC Input Ratings Calibration Interval	Standard Option Precision	nded	Isolation AC FAN $\pm 60$ Vdc when connecting shorting (+)sense and the (-)output and the 220V $\pm$ 10% $50\sim 60$ Hz $\pm 10$ % $50\sim 60$ Hz $\pm 10$ % $\pm$	e (-)sense terminals
Cooling Output Terminal Isolated (maximum, from chas AC Input Ratings Calibration Interval Dimensions	Standard Option Precision		Isolation AC FAN  ±60 Vdc when connecting shorting (+)sense and the (-)output and the 220V ± 10% 50~60Hz 110V ± 10% 50~60Hz 115V ± 10% 50~60Hz 230V ± 10% 50~60Hz 6 month 1 year 300mm(W) * 150mm(H) * 465mm(	e (-)sense terminals