

SPECIFICATIONS

Programmable DC Power Supply

MODEL: OPS-5020



Parameter			Specifications	
2	Voltage		0 to 50V	
Output rating(@0℃ ~ 40℃)	Current		0 to 20A	
Output WATT		1000W		
Programming Accuracy	Voltage		0.05%+16.7mV	
(@25℃ ±5℃)±(%of output + offset)	Current		0.2%+20.0mA	
Readback Accuracy	Voltage		0.05%+8.3mV	
(@25℃ ±5℃)±(%of output + offset)	±(%of output + offset) Current		0.2%+10.0mA	
D: 1	Voltage		≤ 3mVp-p	
Ripple and Noise(20Hz to 20MHz)	Current		≤ 5mArms	
	Voltage		3.3mV	
Load Regulation	Current		2.0mA	
	Voltage		0.8mV	
Line Regulation	Current		2.0mA	
	Programming/Readback		≤0.42mV / ≤0.20mA	
Resolution	Display Meter		1mV / 1mA	
Temperature Coefficient ±(%of output + offset) Voltage			0.05%+5.0mV	
After a 30-minute warm-up	Current		0.2%+10.0mA	
Stability ±(%of output + offset)	Voltage		0.05%+1.7mV	
After a 1 hour warm-up			0.2%+4.0mA	
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Transient Response Time			Less than 50 s for output to recover to within 15mV following a change in output current from full load to half load or vice versa	
		Dicina tima	≤ 7.5V/ms	
Voltage Programming Speed	No load	Rising time	≥ 7.3\/\ms	
		Falling time		
	Half load	Rising time	≤ 3.25V/ms	
	Falling time		≤ 6V/ms	
	Voltage Drop		Up to 1V per each lead	
Remote Sensing Capability	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 rating	
Output Voltage Overshoot & Undershoot	Power Switch ON/OFF		No overshoot, undershoot : ≤ -0.8V	
	Voltage Ou	tput Setting	No overshoot, No undershoot	
Remote Interface			GPIB(IEEE-488.2) Option , RS232C Standard	
Programming Language			SCPI(Standard Commands for Pro	
Command Processing Time(average)	Apply		Setting	20ms
			Query	32ms
	Output Setting		Voltage & Current Setting	15ms
			Voltage & Current Query	32ms
	Measurement		Voltage & Current Query	32ms
	The Other		Setting & Query	< 35ms
State Storage Memory		Ten user-configurable(voltage,cur	rent,OVP & OCP level)stored states	
	Step(Voltage,Current,		Maximum 100 steps	
Cycling Mode	Slope & Delay time)		·	
		<u> </u>		
	Slope time		0sec ~ 86,400sec (24 hours)	
	-		0sec ~ 86,400sec (24 hours) 100ms ~ 86,400sec(24 hours)	
	Slope time			
Operation Tomporature	Slope time Delay time		100ms ~ 86,400sec(24 hours) Maximum 15milion times	higher temperatures the output current is derated
Operation Temperature	Slope time Delay time		100ms ~ 86,400sec(24 hours) Maximum 15milion times	
Operation Temperature Cooling	Slope time Delay time		100ms ~ 86,400sec(24 hours) Maximum 15milion times 0° ~ 40° for full rated output. Al	
	Slope time Delay time Repeat		100ms ~ 86,400sec(24 hours) Maximum 15million times 0°C ~ 40°C for full rated output. Al linearly to 50% at 55°C maximum to Isolation AC FAN ±60 Vdc when connecting shortin	emperature g conductors without insulation to the (+)output to the
Cooling	Slope time Delay time Repeat		100ms ~ 86,400sec(24 hours) Maximum 15milion times 0°C ~ 40°C for full rated output. Al linearly to 50% at 55°C maximum 1 Isolation AC FAN ±60 Vdc when connecting shortin (+)sense and the (-)output and th	emperature g conductors without insulation to the (+)output to the
Cooling	Slope time Delay time Repeat		100ms ~ 86,400sec(24 hours) Maximum 15milion times 0°C ~ 40°C for full rated output. Al linearly to 50% at 55°C maximum 1 Isolation AC FAN ±60 Vdc when connecting shortin (+)sense and the (-)output and th 220V ± 10% 50~60Hz	emperature g conductors without insulation to the (+)output to the
Cooling Output Terminal Isolated (maximum, from chas	Slope time Delay time Repeat ssis ground) Standard		$\begin{array}{l} 100\text{ms} \sim 86,400\text{sec}(24\text{ hours}) \\ \text{Maximum 15milion times} \\ 0^{\circ}\text{C} \sim 40^{\circ}\text{C for full rated output. At linearly to 50\% at 55^{\circ}\text{C maximum to 150 latin AC FAN} \\ \pm 60Vdc when connecting shortin (+)sense and the (-)output and th 220V \pm 10% 50~60Hz $	g conductors without insulation to the (+)output to the
Cooling Output Terminal Isolated (maximum, from chas	Slope time Delay time Repeat		$\begin{array}{l} 100\text{ms} \sim 86,400\text{sec}(24\text{ hours}) \\ \text{Maximum 15milion times} \\ 0^\circ\text{C} \sim 40^\circ\text{C} \text{ for full rated output. At linearly to 50\% at 55^\circ\text{C} \text{ maximum to 150 latin AC FAN} \\ \pm 60^\text{V}\text{dc} \text{ when connecting shortin (+)}\text{sense and the (-)}\text{output and the 120V} \pm 10\% 50\text{~60Hz} \\ 110\text{V} \pm 10\% 50\text{~60Hz} \\ 115\text{V} \pm 10\% 50\text{~60Hz} \\ \end{array}$	emperature g conductors without insulation to the (+)output to the
Cooling Output Terminal Isolated (maximum, from chas	Slope time Delay time Repeat Siss ground) Standard Option		100ms ~ 86,400sec(24 hours) Maximum 15milion times 0°C ~ 40°C for full rated output. A linearly to 50% at 55°C maximum isolation AC FAN ±60 Vdc when connecting shortin (+)sense and the (-)output and the 220V ± 10% 50~60Hz 110V ± 10% 50~60Hz 115V ± 10% 50~60Hz 230V ± 10% 50~60Hz	emperature g conductors without insulation to the (+)output to the
Cooling Output Terminal Isolated (maximum, from chas	Slope time Delay time Repeat Siss ground) Standard Option Precision		100ms ~ 86,400sec(24 hours) Maximum 15milion times 0°C ~ 40°C for full rated output. Al linearly to 50% at 55°C maximum 1 Isolation AC FAN ±60 Vdc when connecting shortin (+)sense and the (-)output and the 220V ± 10% 50~60Hz 110V ± 10% 50~60Hz 115V ± 10% 50~60Hz 230V ± 10% 50~60Hz 6 month	g conductors without insulation to the (+)output to the
Cooling Output Terminal Isolated (maximum, from chase AC Input Ratings Calibration Interval	Slope time Delay time Repeat Siss ground) Standard Option Precision Recommet	nded	$\begin{array}{l} 100\text{ms} \sim 86,400\text{sec}(24\text{ hours}) \\ \text{Maximum 15milion times} \\ 0^\circ\text{C} \sim 40^\circ\text{C} \text{ for full rated output. At linearly to 50\% at 55^\circ\text{C} \text{ maximum to 1500 linearly to 50\% at 55^\circ\text{C}} \\ \pm 60\text{Vdc} when connecting shortin (+) sense and the (-) output and th 1220V \pm 10% 50~60Hz 110V \pm 10% 50~60Hz 115V \pm 10% 50~60Hz 230V \pm 10% 50~60Hz 6 month 1 year$	g conductors without insulation to the (+)output to the e (-)sense terminals
Cooling Output Terminal Isolated (maximum, from chase AC Input Ratings Calibration Interval Dimensions (19-inch 4U Standard, not include	Slope time Delay time Repeat Siss ground) Standard Option Precision Recommet	nded	100ms ~ 86,400sec(24 hours) Maximum 15milion times 0°C ~ 40°C for full rated output. Al linearly to 50% at 55°C maximum isolation AC FAN ±60 Vdc when connecting shortin (+)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 426mm(W) * 177mm(H) * 505mm(H)	g conductors without insulation to the (+)output to the e (-)sense terminals
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