

## **SPECIFICATIONS**

## Programmable DC Power Supply

MODEL: OPS-5050



Parameter			Specifications	
(60% 40%)	Voltage		0 to 50V	
Output rating(@0℃ ~ 40℃)	Current		0 to 50A	
Output WATT		2500W		
Programming Accuracy Voltage		0.05%+16.7mV		
(@25℃ ±5℃)±(%of output + offset)	±(%of output + offset) Current		0.2%+50.0mA	
Readback Accuracy	curacy Voltage		0.05%+8.3mV	
@25°C ±5°C)±(%of output + offset)			0.2%+25.0mA	
D: 1	Voltage		≤ 3mVp-p	
Ripple and Noise(20Hz to 20MHz)	Current		≤ 12.5mArms	
1.0	Voltage		3.3mV	
Load Regulation	Current		5.0mA	
Line Regulation	Voltage		0.8mV	
	Current		5.0mA	
	Programming/Readback		≤0.42mV / ≤0.50mA	
Resolution	Display Meter		1mV / 1mA	
Temperature Coefficient ±(%of output + offset			0.05%+5.0mV	
After a 30-minute warm-up	Current		0.2%+25.0mA	
Stability ±(%of output + offset)			0.05%+1.7mV	
After a 1 hour warm-up	Current		0.2%+10.0mA	
			Less than 50/s for output to recover to within 15mV following a change in output current	
Transient Response Time			from full load to half load or vice versa	
		Rising time	≤ 7.5V/ms	
	No load	Falling time	≤ 3V/ms	
Voltage Programming Speed		Rising time	≤ 3.25V/ms	
	Half load	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	
Terriote defining dapability			Subtract voltage drop in load leads from specified output voltage rating.	
	Load Voltage OVP		Subtract voltage grop in load leads from specified output voltage rating.  5% + 0.5V	
OVP and OCP Accuracy ±(%of output + offset			5% + 0.5V	
OVP and OCP Accuracy ±(%or output + onser				t
	Activation Time Power Switch ON/OFF		< 80ms when maximum output rating No overshoot, undershoot : ≤ −0.8V	
Output Voltage Overshoot & Undershoot	Voltage Output Setting			
		tput Setting	No overshoot, No undershoot	
Remote Interface			GPIB(IEEE-488.2) Option , RS232C Standard  SCPI(Standard Commands for Programmable Instruments)	
Programming Language				
Command Processing Time(average)	Apply		Setting	20ms
			Query	32ms
	Output Setting		Voltage & Current Setting	15ms
			Voltage & Current Query	32ms
	Measureme	ent	Voltage & Current Query	32ms
	Measureme The Other	ent	Voltage & Current Query Setting & Query	32ms < 35ms
State Storage Memory	The Other		Voltage & Current Query Setting & Query	32ms
State Storage Memory	The Other Step(Voltage	ge,Current,	Voltage & Current Query Setting & Query Ten user-configurable(voltage,cur	32ms < 35ms
,	The Other  Step(Voltage Slope & December 2)	ge,Current, elay time)	Voltage & Current Query Setting & Query Ten user-configurable(voltage,cur Maximum 100 steps	32ms < 35ms
State Storage Memory  Cycling Mode	The Other  Step(Voltag Slope & De Slope time	ge,Current, elay time)	Voltage & Current Query Setting & Query Ten user-configurable(voltage,cur Maximum 100 steps 0sec ~ 86,400sec (24 hours)	32ms < 35ms
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Cycling Mode  Operation Temperature	The Other  Step(Voltag Slope & De Slope time Delay time Repeat	ge,Current, elay time)	Voltage & Current Query Setting & Query Ten user-configurable(voltage,cur Maximum 100 steps  0sec ~ 86,400sec (24 hours) 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	32ms < 35ms  Trent,OVP & OCP level)stored states  t higher temperatures the output current is derated temperature  g conductors without insulation to the (+)output to the
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Cycling Mode  Operation Temperature  Cooling  Output Terminal Isolated (maximum, from chas	The Other  Step(Voltage Slope & De Slope time Delay time Repeat	ge,Current, elay time)	Voltage & Current Query  Setting & Query  Ten user-configurable(voltage,cur)  Maximum 100 steps  0sec ~ 86,400sec (24 hours)  100ms ~ 86,400sec(24 hours)  Maximum 15milion times  0° ~ 40° for full rated output. A linearly to 50% at 55° maximum isolation AC FAN  ±60 Vdc when connecting shortin (+)sense and the (-)output and the	32ms < 35ms  Trent,OVP & OCP level)stored states  t higher temperatures the output current is derated temperature  g conductors without insulation to the (+)output to the
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Cycling Mode  Operation Temperature  Cooling  Output Terminal Isolated (maximum, from chas	The Other  Step(Voltage Slope & De Slope time Delay time Repeat  Ssis ground)  Standard	ge,Current, elay time)	Voltage & Current Query  Setting & Query  Ten user-configurable(voltage,cur)  Maximum 100 steps  Osec ~ 86,400sec (24 hours)  100ms ~ 86,400sec(24 hours)  Maximum 15milion times  O°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	32ms < 35ms  Trent,OVP & OCP level)stored states  t higher temperatures the output current is derated temperature  g conductors without insulation to the (+)output to the
Cycling Mode  Operation Temperature  Cooling  Output Terminal Isolated (maximum, from chase)  AC Input Ratings	The Other  Step(Voltage Slope & De Slope time Delay time Repeat  Ssis ground)  Standard	ge,Current, elay time)	Voltage & Current Query  Setting & Query  Ten user-configurable(voltage,cur)  Maximum 100 steps  0sec ~ 86,400sec (24 hours)  100ms ~ 86,400sec(24 hours)  Maximum 15milion times  0° ~ 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 th  220V ± 10% 50~60Hz  110V ± 10% 50~60Hz  115V ± 10% 50~60Hz	32ms < 35ms  Trent,OVP & OCP level)stored states  t higher temperatures the output current is derated temperature  g conductors without insulation to the (+)output to the
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Cycling Mode  Operation Temperature  Cooling  Output Terminal Isolated (maximum, from chase)  AC Input Ratings	Step(Voltag Slope & De Slope time Delay time Repeat  Standard Option  Precision Recommer	ge,Current, elay time)	Voltage & Current Query  Setting & Query  Ten user-configurable(voltage,cur)  Maximum 100 steps  0sec ~ 86,400sec (24 hours) 100ms ~ 86,400sec(24 hours)  Maximum 15milion times  0° ~ 40° for full rated output. A linearly to 50% at 55° 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	32ms < 35ms  rent,OVP & OCP level)stored states  thigher temperatures the output current is derated temperature  g conductors without insulation to the (+)output to the e (-)sense terminals
Cycling Mode  Operation Temperature  Cooling  Output Terminal Isolated (maximum, from chase)  AC Input Ratings  Calibration Interval	Step(Voltag Slope & De Slope time Delay time Repeat  Standard Option  Precision Recommer	ge,Current, elay time)	Voltage & Current Query  Setting & Query  Ten user-configurable(voltage,cur)  Maximum 100 steps  0sec ~ 86,400sec (24 hours)  100ms ~ 86,400sec(24 hours)  Maximum 15milion times  0° ~ 40° for full rated output. A linearly to 50% at 55° 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	32ms < 35ms  rent,OVP & OCP level)stored states  thigher temperatures the output current is derated temperature  g conductors without insulation to the (+)output to the e (-)sense terminals
Cycling Mode  Operation Temperature  Cooling  Output Terminal Isolated (maximum, from chase)  AC Input Ratings  Calibration Interval  Dimensions (19-inch 8U Standard, not include)	Step(Voltag Slope & De Slope time Delay time Repeat  Standard Option  Precision Recommer	ge,Current, elay time)	Voltage & Current Query  Setting & Query  Ten user-configurable(voltage,cur)  Maximum 100 steps  0sec ~ 86,400sec (24 hours)  100ms ~ 86,400sec(24 hours)  Maximum 15milion times  0° ~ 40° for full rated output. A linearly to 50% at 55° 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) * 354mm(H) *650mm(fill)	32ms < 35ms  rent,OVP & OCP level)stored states  thigher temperatures the output current is derated temperature  g conductors without insulation to the (+)output to the e (-)sense terminals