

SPECIFICATIONS

Programmable DC Power Supply

MODEL : OPS-1005



ODA
TECHNOLOGIES
www.odacore.com

Parameter			Specifications	
Output rating(@0℃ ~ 40℃)	Voltage		0 to 100	
	Current		0 to 5	
Output WATT			500W	
Programming Accuracy (@25℃ ±5℃)±(%of output + offset)	Voltage		0.05% + 40mV	
	Current		0.15% + 5mA	
Readback Accuracy (@25℃ ±5℃)±(%of output + offset)	Voltage		0.05% + 20mV	
	Current		0.08% + 3mA	
Ripple and Noise(20Hz to 20MHz)	Voltage		≤ 0.01% mV_{rms}	
	Current		≤ 3 mA_{rms}	
Load Regulation (with V-Sensing)	Voltage		≤ 3mV	
	Current		≤ 500 μA	
Line Regulation (with V-Sensing)	Voltage		≤ 1mV	
	Current		≤ 500 μA	
Resolution	Programming/Readback		≤ 1mV / ≤ 50 μA	
	Display Meter		10mV / 100 μA	
Temperature Coefficient ±(%of output + offset)	Voltage		0.01% + 15mV	
After a 30-minute warm-up	Current		0.02% + 3mA	
Stability ±(%of output + offset)	Voltage		0.02% + 10mV	
After a 1 hour warm-up	Current		0.1% + 1mA	
Transient Response Time			Less than 50 μs 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	
		Falling time	≤ 3V/ms	
	Half load	Rising time	≤ 3.25V/ms	
		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 rating.	
OVP and OCP Accuracy ±(%of output + offset)	OVP		5% + 1V	
	OCP		5% + 0.5A	
	Activation Time		< 80ms when maximum output rating	
Output Voltage Overshoot & Undershoot	Power Switch ON/OFF		No overshoot, undershoot : ≤ -0.8V	
	Voltage Output Setting		No overshoot, No undershoot	
Remote Interface			GPIO(IEEE-488.2) Option , RS232C Standard	
Programming Language			SCPI(Standard Commands for Programmable Instruments)	
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,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)	
	Repeat		Maximum 15million times	
Operation Temperature			0℃ ~ 40℃ for full rated output. At higher temperatures the output current is derated linearly to 50% at 55℃ maximum temperature	
Cooling			Isolation DC FAN	
Output Terminal Isolated (maximum, from chassis ground)			±60 Vdc when connecting shorting conductors without insulation to the (+)output to the (+)sense and the (-)output and the (-)sense terminals	
AC Input Ratings	Standard	220V ± 10% 50~60Hz		
		110V ± 10% 50~60Hz		
	Option	115V ± 10% 50~60Hz		
		230V ± 10% 50~60Hz		
Calibration Interval	Precision	6 month		
	Recommended	1 year		
Dimensions	Standard	426mm(W) * 177mm(H) * 505mm(D) 19-inch 4U Standard Size		
	Option	300mm(W) * 150mm(H) * 465mm(D) Non Standard Small Size		
Maximum Input Power(full load)			1323W	
Weight	Net weight		17kg	
	Gross weight		18.5kg	