

# SPECIFICATIONS

Programmable DC Power Supply

MODEL : OPS-301



# ODA

TECHNOLOGIES  
www.odacore.com

Parameter		Specifications	
Output rating(@0°C ~ 40°C)	Voltage	0 to 30	
	Current	0 to 1	
Output WATT		30W	
Programming Accuracy (@25°C ±5°C)±(%of output + offset)	Voltage	0.05% + 10mV	
	Current	0.15% + 5mA	
Readback Accuracy (@25°C ±5°C)±(%of output + offset)	Voltage	0.05% + 5mV	
	Current	0.08% + 3mA	
Ripple and Noise(20Hz to 20MHz)	Voltage	≤ 2mVp-p	
	Current	≤ 2mArms	
Load Regulation(with V-Sensing)	Voltage	2mV	
	Current	500µA	
Line Regulation(with V-Sensing)	Voltage	500µV	
	Current	500µA	
Resolution	Programming/Readback	≤ 250µV / ≤ 10µA	
	Display Meter	1mV / 100µA	
Temperature Coefficient ±(%of output + offset) After a 30-minute warm-up	Voltage	0.01% + 3mV	
	Current	0.02% + 3mA	
Stability ±(%of output + offset) After a 1 hour warm-up	Voltage	0.02% + 1mV	
	Current	0.1% + 1mA	
Transient Response Time		Less than 50µs 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% + 0.5V	
	OCP	5% + 0.5V	
	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°C ~ 40°C for full rated output. At higher temperatures the output current is derated linearly to 50% at 55°C 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 (19-inch 3U Standard)	Excepted the bumper	213mm(W) * 133mm(H) * 394mm(D)	
	Included the bumper	226mm(W) * 147mm(H) * 394mm(D)	
Maximum Input Power(full load)		117W	
Weight	Net weight	5kg	
	Gross weight	6.5kg	