

# SPECIFICATIONS

Programmable DC Power Supply

MODEL : OPM-181D



# ODA

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Parameter		Specifications	
Output rating(@0℃ ~ 40℃)	Channel 1	0 to 18V / 0 to 1A	
	Channel 2	0 to 18V / 0 to 1A	
Output WATT		36W	
Programming Accuracy (@25℃ ±5℃)±(%of output + offset)	Voltage	0.05%+6.0mV	
	Current	0.2%+1.0mA	
Readback Accuracy (@25℃ ±5℃)±(%of output + offset)	Voltage	0.05%+3.0mV	
	Current	0.2%+0.5mA	
Ripple and Noise(20Hz to 20MHz)	Voltage	≤ 2mVp-p	
	Current	≤ 2mArms	
Load Regulation	Voltage	1.2mV	
	Current	0.1mA	
Line Regulation	Voltage	0.3mV	
	Current	0.1mA	
Resolution	Programming/Readback	≤0.15mV / ≤0.01mA	
	Display Meter	1mV / 0.1mA	
Temperature Coefficient ±(%of output + offset) After a 30-minute warm-up	Voltage	0.05%+1.8mV	
	Current	0.2%+0.5mA	
Stability ±(%of output + offset) After a 1 hour warm-up	Voltage	0.05%+0.6mV	
	Current	0.2%+0.2mA	
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
OVP and OCP Accuracy ±(%of output + offset)	OVP	5% + 0.5V	
	OCP	5% + 0.5A	
	Activation Time	< 80ms when maximum output rating	
Tracking Accuracy		0.1% + 10mV	
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	28ms
		Query	32ms
	Output Setting	Voltage & Current Setting	28ms
		Voltage & Current Query	32ms
	Measurement	Voltage & Current Query	Present mode : 47ms Buffer mode : 32ms
	The Other	Setting & Query	< 35ms
State Storage Memory		Ten user-configurable(voltage,current,OVP & OCP level)stored states	
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 atting.	
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)		±30V output is ±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)		172.4W	
Weight	Net weight	9kg	
	Gross weight	10.5kg	