## SPECIFICATIONS Programmable DC Power Supply



## MODEL : OPM-3001D

Parameter			Specifications	
Output rating(@0°C ~ 40°C)		0 to 300V / 0 to 1A		
Output rating( $@0C \sim 40C$ )	Channel 2		0 to 300V / 0 to 1A	
Output WATT			600W	
Programming Accuracy	Voltage		0.05%+100.0mV	
(@25℃ ±5℃)±(%of output + offset)	Current		0.2%+1.0mA	
Readback Accuracy	Voltage		0.05%+50.0mV	
(@25℃ ±5℃)±(%of output + offset)	Current		0.2%+0.5mA	
Voltage			≤ 0.01%mVrms	
Ripple and Noise(20Hz to 20MHz)	Current		≤ 2mArms	
	Voltage		20.0mV	
Load Regulation	Current		0.1mA	
Line Regulation	Voltage		5.0mV	
	Current		0.1mA	
Resolution	Programming/Readback		≤2.50mV / ≤0.01mA	
	Display Meter		10mV / 0.1mA	
Femperature Coefficient $\pm$ (%of output + offset)Voltage		0.05%+30.0mV		
After a 30-minute warm-up	Current		0.2%+0.5mA	
Stability ±(%of output + offset)	Voltage		0.05%+10.0mV	
After a 1 hour warm-up	Current		0.2%+0.2mA	
Transient Response Time			Less than 50 $\mu\rm{s}$ 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	Half load	Rising time	$\leq$ 7.5V/ms	
		Falling time	≤ 3V/ms	
		Rising time	≤ 3.25V/ms	
		Falling time	≤ 6V/ms	
	OVP		5% + 0.5V	
OVP and OCP Accuracy $\pm$ (%of output + offset	) OCP		5% + 0.5A	
	Activation Time		< 80ms when maximum output rating	
Tracking Accuracy		0.1% + 10mV		
Output Voltage Oversheet & Lindersheet	Power Switch ON/OFF		No overshoot, undershoot : $\leq -0.8$	V
Output Voltage Overshoot & Undershoot	Voltage Output Setting		No overshoot, No undershoot	
Remote Interface			GPIB(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,curre	ent,OVP & OCP level)stored states
	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 atiing.
Operation Temperature			$0^{\circ}$ 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 AC FAN	
Output Terminal Isolated (maximum, from chassis ground)			$\pm$ 30V output is $\pm$ 60 Vdc when connecting shorting conductors without insulation to the (+)output to the (+)sense and the (-)output and the (-)sense terminals	
	Standard		220V ± 10% 50~60Hz	
AC Input Ratings	Option		110V ± 10% 50~60Hz	
			115V ± 10% 50~60Hz	
			230V ± 10% 50~60Hz	
	Precision		6 month	
	1.100101011		1 year	
Calibration Interval	Recommer	nded	1 year	
Calibration Interval Dimensions	L	nded	1 year 300mm(W) * 150mm(H) * 465mm(E	))
	L	nded		)
Dimensions	L		300mm(W) * 150mm(H) * 465mm(E	)