

# SPECIFICATIONS

Programmable DC Power Supply

MODEL : OPE-2005S



# ODA

TECHNOLOGIES  
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| Parameter   |                        | Specifications  |         |
|---|------------------------|---|---------|
| Output rating(@0°C ~ 40°C)  |                        | 0 to 200V / 0 to 5A   |         |
| Output WATT   |                        | 1 KW  |         |
| Programming Accuracy<br>(@25°C ±5°C)±(%of output + offset)                  | Voltage                | 0.2% + 900mV  |         |
|   | Current                | 0.2% + 25mA   |         |
| Readback Accuracy<br>(@25°C ±5°C)±(%of output + offset)                     | Voltage                | 0.2% + 900mV  |         |
|   | Current                | 0.2% + 25mA   |         |
| Ripple and Noise(20Hz to 20MHz)   | Voltage                | ≤ 0.01%Vrms   |         |
|   | Current                | ≤ 2mArms  |         |
| Load Regulation<br>(@25°C ±5°C)±(%of output + offset)                       | Voltage                | 0.01% + 150mV   |         |
|   | Current                | 0.01% + 1mA   |         |
| Line Regulation<br>(@25°C ±5°C)±(%of output + offset)                       | Voltage                | 0.01% + 150mV   |         |
|   | Current                | 0.01% + 1mA   |         |
| Resolution  | Programming/Readback   | ≤ 70mV / ≤ 1.5mA  |         |
|   | Display Meter          | 1V(3-DIGIT) / 10mA(3-DIGIT)   |         |
| Temperature Coefficient ±(%of output + offset)<br>After a 30-minute warm-up | Voltage                | 0.02% + 20mV  |         |
|   | Current                | 0.05% + 3mA   |         |
| Stability ±(%of output + offset)<br>After a 1 hour warm-up                  | Voltage                | 0.1% + 20mV   |         |
|   | Current                | 0.2% + 5mA  |         |
| Transient Response Time   |                        | Less than 50μs for output to recover to within 50mV following a change in output current from full load to half load or vice versa                          |         |
| Voltage Programming Speed<br>(10% ~ 90%)                                    | No load                | Rising time   | ≤ 120ms |
|   |                        | Falling time  | ≤ 3.6s  |
|   | Half load              | Rising time   | ≤ 120ms |
|   |                        | Falling time  | ≤ 15ms  |
| Output Voltage Overshoot & Undershoot                                       | Power Switch ON/OFF    | No overshoot, undershoot : ≤ 0V ~ ≥ -0.3V   |         |
|   | Voltage Output Setting | No overshoot, No undershoot   |         |
| Remote Interface  |                        | RS232C Standard (RS485 Option)  |         |
| Programming Language  |                        | SCPI(Standard Commands for Programmable Instruments)  |         |
| Command Processing Average Time<br>(@19200bps)                              | Output Setting         | Voltage & Current Setting   | 10ms    |
|   |                        | Voltage & Current Query   | 12ms    |
|   | Measurement            | Voltage & Current Query   | 15ms    |
|   | The Other              | Setting & Query   | 32ms    |
| State Storage Memory  |                        | Five user-configurable(voltage,current)stored states  |         |
| Operation Temperature Range   |                        | 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 AC 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  |         |
|   | Option                 | 100V ± 10% 50~60Hz  |         |
|   |                        | 230V ± 10% 50~60Hz  |         |
| Calibration Interval  | Recommended            | 1 year  |         |
| Dimensions  | Standard               | 426mm(W) * 177mm(H) * 505mm(D) 19-inch 4U Standard Size   |         |
| Maximum Input Power(full load)  |                        | 2.61KW  |         |
| Weight  | Net weight             | 31 kg   |         |
|   | Gross weight           | 32.5kg  |         |

