

# SPECIFICATIONS

Programmable DC Power Supply

MODEL : OPE-503Q



# ODA

TECHNOLOGIES  
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| Parameter   |  | Specifications                           |        |
|---|--|--|--------|
| Output rating(@0°C ~ 40°C)  | Channel 1  | 0 to 50V / 0 to 3A                       |        |
|   | Channel 2  | 0 to -50V / 0 to 3A                      |        |
|   | Fixed output 1   | 5V / 2A                                  |        |
|   | Fixed output 2   | 15V / 1A                                 |        |
| Output WATT   | 300W   |  |        |
| Programming Accuracy<br>(@25°C ±5°C)±(%of output + offset)                  | Voltage  | 0.2% + 300mV                             |        |
|   | Current  | 0.2% + 15mA                              |        |
| Readback Accuracy<br>(@25°C ±5°C)±(%of output + offset)                     | Voltage  | 0.2% + 300mV                             |        |
|   | Current  | 0.2% + 15mA                              |        |
| Ripple and Noise(20Hz to 20MHz)   | Voltage  | ≤ 3mVp-p                                 |        |
|   | Current  | ≤ 2mArms                                 |        |
| Load Regulation<br>(@25°C ±5°C)±(%of output + offset)                       | Voltage  | 0.01% + 2mV                              |        |
|   | Current  | 0.01% + 500µA                            |        |
| Line Regulation<br>(@25°C ±5°C)±(%of output + offset)                       | Voltage  | 0.01% + 2mV                              |        |
|   | Current  | 0.01% + 500µA                            |        |
| Resolution  | Programming/Readback   | ≤ 15mV / ≤ 1mA                           |        |
|   | Display Meter  | 100mV / 10mA                             |        |
| Temperature Coefficient ±(%of output + offset)<br>After a 30-minute warm-up | Voltage  | 0.02% + 2mV                              |        |
|   | Current  | 0.02% + 3mA                              |        |
| Stability ±(%of output + offset)<br>After a 1 hour warm-up                  | Voltage  | 0.1% + 5mV                               |        |
|   | Current  | 0.2% + 5mA                               |        |
| 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<br>(10% ~ 90%)                                    | No load  | Rising time                              | ≤ 70ms |
|   |  | Falling time                             | ≤ 1.5s |
|   | Half load  | Rising time                              | ≤ 70ms |
|   |  | Falling time                             | ≤ 10ms |
| Tracking Accuracy   | 0.5% + 100mV   |  |        |
| 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 DC FAN   |  |        |
| Output Terminal Isolated (maximum, from chassis ground)                     | ±30V output is ±60 Vdc when connecting shorting conductors without insulation between the (+),(-) output terminals and shassis.    |  |        |
| AC Input Ratings  | Standard   | 220V ± 10% 50~60Hz                       |        |
|   |  | 100V ± 10% 50~60Hz                       |        |
|   | Option   | 110V ± 10% 50~60Hz                       |        |
|   |  | 230V ± 10% 50~60Hz                       |        |
| Calibration Interval  | Recommended  | 1 year                                   |        |
| Dimensions (19-inch Half 2U Standard , not include output terminal)         | 213mm(W) * 88mm(H) * 295mm(D)  |  |        |
| Maximum Input Power(full load)  | 810W   |  |        |
| Weight  | Net weight   | 11 kg                                    |        |
|   | Gross weight   | 12.2kg                                   |        |