# SPECIFICATIONS

## Programmable DC Power Supply

MODEL : OPS-910

ODA TECHNOLOGIES
www.odacore.com

| Parameter | | | Specifications | |
|---|---|---|---|---|
| Output rating(@0℃ ~ 40℃) | Voltage | | 0 to 9 | |
| | Current | | 0 to 10 | |
| Output WATT | | | 90W | |
| Programming Accuracy | Voltage | | 0.05% + 3mV | |
| (@25℃ ±5℃)±(%of output + offset) | Current | | 0.2% + 10mA | |
| Readback Accuracy | Voltage | | 0.05% + 1.5mV | |
| (@25℃ ±5℃)±(%of output + offset) | Current | | 0.15% + 5mA | |
| Ripple and Noise(20Hz to 20MHz) | Voltage | | ≤ 2mVp-p | |
| | Current | | ≤ 2mArms | |
| Load Regulation (with V-Sensing) | Voltage | | ≤ 2mV | |
| | Current | | ≤ 500㎂ | |
| Line Regulation (with V-Sensing) | Voltage | | ≤ 500㎶ | |
| | Current | | ≤ 1mA | |
| Resolution | Programming/Readback | | ≤ 100㎶ / 100㎂ | |
| | Display Meter | | 1mV / 1mA | |
| Temperature Coefficient ±(%of output + offset) | Voltage | | 0.01% + 3mV | |
| After a 30-minute warm-up | Current | | 0.02% + 3mA | |
| Stability ±(%of output + offset) | Voltage | | 0.02% + 1mV | |
| After a 1 hour warm-up | Current | | 0.1% + 1mA | |
| Transient Response Time | | | Less than 50㎲ 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/㎳ | |
| | | Falling time | ≤ 3V/㎳ | |
| | Half load | Rising time | ≤ 3.25V/㎳ | |
| | | Falling time | ≤ 6V/㎳ | |
| 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 ratiing. | |
| OVP and OCP Accuracy ±(%of output + offset) | OVP | | 5% + 0.1V | |
| | OCP | | 5% + 1A | |
| | 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 | | | GPIB(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 15milion times | |
| 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) | | | ±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 | | 110V ± 10% 50~60Hz | |
| | | | 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) | | | 271W | |
| Weight | Net weight | | 6.8㎏ | |
| | Gross weight | | 8.3㎏ | |