

SPECIFICATIONS

Programmable DC Power Supply

MODEL : OPS-1503



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| Parameter | | Specifications | |
|--|---|--|--------------------------|
| Output rating(@0℃ ~ 40℃) | Voltage | 0 to 150 | |
| | Current | 0 to 3 | |
| Output WATT | | 450W | |
| Programming Accuracy (@25℃ ±5℃)±(%of output + offset) | Voltage | 0.05% + 50mV | |
| | Current | 0.15% + 5mA | |
| Readback Accuracy (@25℃ ±5℃)±(%of output + offset) | Voltage | 0.05% + 25mV | |
| | Current | 0.08% + 3mA | |
| Ripple and Noise(20Hz to 20MHz) | Voltage | ≤ 0.01% mV_{rms} | |
| | Current | ≤ 3mA rms | |
| Load Regulation (with V-Sensing) | Voltage | ≤ 4mV | |
| | Current | ≤ 500 μA | |
| Line Regulation (with V-Sensing) | Voltage | ≤ 1mV | |
| | Current | ≤ 500 μA | |
| Resolution | Programming/Readback | ≤ 1.5mV / ≤ 30 μA | |
| | Display Meter | 10mV / 100 μA | |
| Temperature Coefficient ±(%of output + offset) | Voltage | 0.01% + 15mV | |
| After a 30-minute warm-up | Current | 0.02% + 3mA | |
| Stability ±(%of output + offset) | Voltage | 0.02% + 10mV | |
| After a 1 hour warm-up | Current | 0.1% + 1mA | |
| Transient Response Time | | Less than 50 μs 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 |
| 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 rating. | |
| OVP and OCP Accuracy ±(%of output + offset) | OVP | 5% + 1.5V | |
| | OCP | 5% + 0.3A | |
| | 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 | | GPIO(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 15million 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 |
| | | 110V ± 10% | 50~60Hz |
| | Option | 115V ± 10% | 50~60Hz |
| | | 230V ± 10% | 50~60Hz |
| Calibration Interval | Precision | 6 month | |
| | Recommended | 1 year | |
| Dimensions | Standard | 426mm(W) * 177mm(H) * 505mm(D) | 19-inch 4U Standard Size |
| | Option | 300mm(W) * 150mm(H) * 465mm(D) | Non Standard Small Size |
| Maximum Input Power(full load) | | 1195W | |
| Weight | Net weight | 15kg | |
| | Gross weight | 16.5kg | |