# SPECIFICATIONS
## Programmable DC Power Supply
### MODEL : OPM-1820D

**ODA TECHNOLOGIES**
www.odacore.com

| Parameter | | | Specifications | | |
|---|---|---|---|---|---|
| Output rating(@0℃ ~ 40℃) | Channel 1 | | 0 to 18V  /  0 to 20A | | |
| | Channel 2 | | 0 to 18V  /  0 to 20A | | |
| Output WATT | | | 720W | | |
| Programming Accuracy (@25℃ ±5℃)±(%of output + offset) | Voltage | | 0.05%+6.0mV | | |
| | Current | | 0.2%+20.0mA | | |
| Readback Accuracy (@25℃ ±5℃)±(%of output + offset) | Voltage | | 0.05%+3.0mV | | |
| | Current | | 0.2%+10.0mA | | |
| Ripple and Noise(20Hz to 20MHz) | Voltage | | ≤ 2mVp-p | | |
| | Current | | ≤ 5mArms | | |
| Load Regulation | Voltage | | 1.2mV | | |
| | Current | | 2.0mA | | |
| Line Regulation | Voltage | | 0.3mV | | |
| | Current | | 2.0mA | | |
| Resolution | Programming/Readback | | ≤0.15mV  /  ≤0.20mA | | |
| | Display Meter | | 1mV  /  1mA | | |
| Temperature Coefficient ±(%of output + offset) After a 30-minute warm-up | Voltage | | 0.05%+1.8mV | | |
| | Current | | 0.2%+10.0mA | | |
| Stability ±(%of output + offset) After a 1 hour warm-up | Voltage | | 0.05%+0.6mV | | |
| | Current | | 0.2%+4.0mA | | |
| 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/㎳ | | |
| OVP and OCP Accuracy ±(%of output + offset) | OVP | | 5% + 0.5V | | |
| | OCP | | 5% + 0.5A | | |
| | Activation Time | | < 80ms when maximum output rating | | |
| Tracking Accuracy | | | 0.1% + 10mV | | |
| 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 | 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,current,OVP & OCP level)stored states | | |
| 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 atiing. | | |
| 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 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 | | 110V ± 10%   50~60Hz | | |
| | | | 115V ± 10%   50~60Hz | | |
| | | | 230V ± 10%   50~60Hz | | |
| Calibration Interval | Precision | | 6 month | | |
| | Recommended | | 1 year | | |
| Dimensions (19-inch 4U Standard , not include output terminal) | | | 426mm(W) * 177mm(H) * 505mm(D) | | |
| Maximum Input Power(full load) | | | 1927.8W | | |
| Weight | Net weight | | 32㎏ | | |
| | Gross weight | | 33.5㎏ | | |

※주문자 사양 모델은 spec변경이 이루어질 수 있습니다.