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# PSU-Series Specifications

The specifications apply when the PSU-Series is powered on for at least 30 minutes under +20°C~+30°C.

| **Model** | | **6-200** | **8-180** | **12.5-120** | **15-100** | **20-76** | **30-50** | **40-38** | **50-30** |
|---|---|---|---|---|---|---|---|---|---|
| Rated output voltage (*1) | | 6V | 8V | 12.5V | 15V | 20V | 30V | 40V | 50V |
| Rated output current (*2) | | 200A | 180A | 120A | 100A | 76A | 50A | 38A | 30A |
| Rated output power | | 1200W | 1440W | 1500W | 1500W | 1520W | 1500W | 1520W | 1500W |
| **RIPPLE AND NOISE (*5)** | | **6-200** | **8-180** | **12.5-120** | **15-100** | **20-76** | **30-50** | **40-38** | **50-30** |
| CVp-p(10 ~ 20MHz) p-p(*6) | | 60mV | 60mV | 60mV | 60mV | 60mV | 60mV | 60mV | 60mV |
| CVrms(5Hz ~ 1MHz) r.m.s.(*7) | | 8mV | 8mV | 8mV | 8mV | 8mV | 8mV | 8mV | 8mV |
| CCrms(5Hz ~ 1MHz) r.m.s. (*12) | | 400mA | 360mA | 240mA | 200mA | 152mA | 125mA | 95mA | 85mA |
| **LOAD REGULATION** | | **6-200** | **8-180** | **12.5-120** | **15-100** | **20-76** | **30-50** | **40-38** | **50-30** |
| Voltage(*4) | | 2.6mV | 2.8mV | 3.25mV | 3.5mV | 4mV | 5mV | 6mV | 7mV |
| Current (*11) | | 45mA | 41mA | 29mA | 25mA | 20.2mA | 15mA | 12.6mA | 11mA |
| **LINE REGULATION** | | **6-200** | **8-180** | **12.5-120** | **15-100** | **20-76** | **30-50** | **40-38** | **50-30** |
| Voltage(*3) | | 2.6mV | 2.8mV | 3.25mV | 3.5mV | 4mV | 5mV | 6mV | 7mV |
| Current (*3) | | 22mA | 20mA | 14mA | 12mA | 9.6mA | 7mA | 5.8mA | 5mA |
| **ANALOG PROGRAMMING AND MONITORING** | | **6-200** | **8-180** | **12.5-120** | **15-100** | **20-76** | **30-50** | **40-38** | **50-30** |
| External Voltage Control Output Voltage | | Accuracy and linearity: ±0.5% of rated output voltage. | | | | | | | |
| External Voltage Control Output Current | | Accuracy and linearity: ±1% of rated output current. | | | | | | | |
| External Resistor Control Output Voltage | | Accuracy and linearity: ±1% of rated output voltage. | | | | | | | |
| External Resistor Control Output Current | | Accuracy and linearity: ±1.5% of rated output current. | | | | | | | |
| Output Voltage Monitor | | Accuracy: ±1% | | | | | | | |
| Output Current Monitor | | Accuracy: ±1% | | | | | | | |
| Shutdown Control | | Turns the output off with a LOW (0V to 0.5V) or short-circuit. | | | | | | | |
| Output On/Off Control | | Possible logic selections:<br>Turn the output on using a LOW (0V to 0.5V) or short-circuit, turn the output off using a HIGH (4.5V to 5V) or open-circuit.<br>Turn the output on using a HIGH (4.5V to 5V) or open-circuit, turn the output off using a LOW (0V to 0.5V) or short-circuit. | | | | | | | |
| Alarm Clear Control | | Clear alarms with a LOW (0V to 0.5V) or short-circuit. | | | | | | | |
| CV/CC/ALM/PWR ON/OUT ON indicator | | Photocoupler open collector output; Maximum voltage 30V, maximum sink current 8mA. | | | | | | | |
| Trigger Out | | Maximum low level output = 0.8V; minimum high level output = 2V; Maximum source current = 8mA. | | | | | | | |
| Trigger In | | Maximum low level input voltage = 0.8V; minimum high level input votage = 2V, Maximum sink current = 8mA. | | | | | | | |
| **FRONT PANEL** | | **6-200** | **8-180** | **12.5-120** | **15-100** | **20-76** | **30-50** | **40-38** | **50-30** |
| Display, 4 digits Voltage accuracy | 0.1% + | 12mV | 16mV | 25mV | 30mV | 40mV | 60mV | 80mV | 100mV |
| Current accuracy | 0.2% + | 600mA | 540mA | 360mA | 300mA | 228mA | 150mA | 114mA | 90mA |
| Indications | | GREEN LED's: CV, CC, V, A, VSR, ISR, DLY, RMT, LAN, M1, M2, M3, RUN, Output ON | | | | | | | |
| | | RED LED's: ALM, ERR | | | | | | | |
| Buttons | | Lock/Local(Unlock), PROT(ALM_CLR), Function(M1), Test(M2), Set(M3), Shift, Output | | | | | | | |
| Knobs | | Voltage, Current | | | | | | | |
| USB port | | Type A USB connector | | | | | | | |
| **TRANSIENT RESPONSE TIME(*10)** | | **6-200** | **8-180** | **12.5-120** | **15-100** | **20-76** | **30-50** | **40-38** | **50-30** |
| Transient Response Time | | 1.5ms | 1.5ms | 1ms | 1ms | 1ms | 1ms | 1ms | 1ms |

| OUTPUT RESPONSE TIME | | 6-200 | 8-180 | 12.5-120 | 15-100 | 20-76 | 30-50 | 40-38 | 50-30 |
|---|---|---|---|---|---|---|---|---|---|
| Rise time (*8) | Rated load | 80ms | 80ms | 80ms | 80ms | 80ms | 80ms | 80ms | 80ms |
| | No load | 80ms | 80ms | 80ms | 80ms | 80ms | 80ms | 80ms | 80ms |
| Fall time (*9) | Rated load | 10ms | 50ms | 50ms | 50ms | 50ms | 80ms | 80ms | 80ms |
| | No load | 500ms | 600ms | 700ms | 700ms | 800ms | 900ms | 1000ms | 1100ms |
| **PROGRAMMING AND MEASUREMENTS (RS-232/485, USB, LAN, GPIB)** | | **6-200** | **8-180** | **12.5-120** | **15-100** | **20-76** | **30-50** | **40-38** | **50-30** |
| Output Voltage Programming Accuracy | 0.05% + | 3mV | 4mV | 6.25mV | 7.5mV | 10mV | 15mV | 20mV | 25mV |
| Output Current Programming Accuracy | 0.2% + | 200mA | 180mA | 120mA | 100mA | 76mA | 50mA | 38mA | 30mA |
| Output Voltage Programming Resolution | | 0.2mV | 0.27mV | 0.4mV | 0.5mV | 0.7mV | 1mV | 1.3mV | 1.7mV |
| Output Current Programming Resolution | | 6mA | 6mA | 4mA | 3.3mA | 2.5mA | 1.7mA | 1.2mA | 1mA |
| Output Voltage Measurement Accuracy | 0.1% + | 6mV | 8mV | 12.5mV | 15mV | 20mV | 30mV | 40mV | 50mV |
| Output Current Measurement Accuracy | 0.2% + | 400mA | 360mA | 240mA | 200mA | 152mA | 100mA | 76mA | 60mA |
| Output Voltage Measurement Resolution | | 0.2mV | 0.27mV | 0.4mV | 0.5mV | 0.7mV | 1mV | 1.3mV | 1.7mV |
| Output Current Measurement Resolution | | 6mA | 6mA | 4mA | 3.3mA | 2.5mA | 1.7mA | 1.2mA | 1mA |
| **TEMPERATURE COEFFICIENCE** | | **6-200** | **8-180** | **12.5-120** | **15-100** | **20-76** | **30-50** | **40-38** | **50-30** |
| Voltage & Current | | 100ppm/℃ after a 30 minute warm-up | | | | | | | |
| **REMOTE SENSE COMPENSATION VOLTAGE(TWO WIRE)** | | **6-200** | **8-180** | **12.5-120** | **15-100** | **20-76** | **30-50** | **40-38** | **50-30** |
| Voltage | | 1V | 1V | 1V | 1V | 1V | 1.5V | 2V | 2V |
| **PROTECTION FUNCTION** | | **6-200** | **8-180** | **12.5-120** | **15-100** | **20-76** | **30-50** | **40-38** | **50-30** |
| Over Voltage Protection (OVP) | Setting range | 0.6 - 6.6V | 0.8-8.8V | 1.25 - 13.75V | 1.5 - 16.5V | 2 - 22V | 3 - 33V | 4 - 44V | 5 - 55V |
| | Setting accuracy | 60mV | 80mV | 125mV | 150mV | 200mV | 300mV | 400mV | 500mV |
| Over Current Protection (OCP) | Setting range | 5 - 220A | 5-198A | 5 - 132A | 5 - 110A | 5 - 83.6A | 5 - 55A | 3.8 - 41.8A | 3 - 33A |
| | Setting accuracy | 4000mA | 3600mA | 2400mA | 2000mA | 1520mA | 1000mA | 760mA | 600mA |
| Under Voltage Limit (UVL) | Setting range | 0 - 6.3V | 0 - 8.4V | 0 - 13.12V | 0 - 15.75V | 0 - 21V | 0 - 31.5V | 0 - 42V | 0 - 52.5V |
| Over Temperature Protection (OHP) | Operation | Turn the output off. | | | | | | | |
| Incorrect Sensing Connection Protection (SENSE) | Operation | Turn the output off. | | | | | | | |
| Low AC Input Protection (AC-FAIL) | Operation | Turn the output off. | | | | | | | |
| Shutdown (SD) | Operation | Turn the output off. | | | | | | | |
| Power Limit (POWER LIMIT) | Operation | Over power limit. | | | | | | | |
| | Value (fixed) | Approx. 105% of rated output power | | | | | | | |
| **INTERFACE CAPABILITIES** | | **6-200** | **8-180** | **12.5-120** | **15-100** | **20-76** | **30-50** | **40-38** | **50-30** |
| USB | | TypeA: Host, TypeB: Slave, Speed: 1.1/2.0, USB Class: CDC(Communications Device Class) | | | | | | | |
| LAN | | MAC Address, DNS IP Address, User Password, Gateway IP Address, Instrument IP Address, Subnet Mask | | | | | | | |
| RS-232 / RS-485 | | Complies with the EIA232D / EIA485 Specifications | | | | | | | |
| GPIB (Factory Option) | | SCPI - 1993, IEEE 488.2 compliant interface | | | | | | | |
| **ISOLATED ANALOG CONTROL INTERFACE (Factory Option)** | | **6-200** | **8-180** | **12.5-120** | **15-100** | **20-76** | **30-50** | **40-38** | **50-30** |
| Voltage Control | | Using 0-5V or 0-10V signals for programming and measurement | | | | | | | |
| Current Control | | Using 4-20mA current signals for programming and measurement | | | | | | | |
| **ENVIRONMENTAL CONDITIONS** | | **6-200** | **8-180** | **12.5-120** | **15-100** | **20-76** | **30-50** | **40-38** | **50-30** |
| Operaing Temperature | | 0° C to 50° C (*14) | | | | | | | |
| Storage Temperature | | -25° C to 70° C | | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Operating Humidity | | 20% to 85% RH; No condensation | | | | | | | |
| Storage Humidity | | 90% RH or less; No condensation | | | | | | | |
| Altitude | | Maximum 2000m | | | | | | | |
| **INPUT CHARACTERISTICS** | | **6-200** | **8-180** | **12.5-120** | **15-100** | **20-76** | **30-50** | **40-38** | **50-30** |
| Norminal Input Rating | | 100Vac to 240Vac, 50Hz to 60Hz, single phase | | | | | | | |
| Input Voltage Range | | 85Vac ~ 265Vac | | | | | | | |
| Input Frequency Range | | 47Hz ~ 63Hz | | | | | | | |
| Maximum Input Current | 100Vac / 200Vac(A) | 21 / 11 | | | | | | | |
| Inrush Current | | Less than 50A. | | | | | | | |
| Maximum Input Power | | 2000VA | | | | | | | |
| Power Factor | 100Vac / 200Vac | 0.99 / 0.98 | | | | | | | |
| Hold-up Time | | 20ms or greater | | | | | | | |
| Efficiency (*13) | 100Vac / 200Vac(%) | 76.5 / 79 | 78/81 | 82 / 85 | 82 / 85 | 83 / 86 | 83 / 86 | 84 / 87 | 84 / 87 |
| **DIMENSIONS & WEIGHT** | | **6-200** | **8-180** | **12.5-120** | **15-100** | **20-76** | **30-50** | **40-38** | **50-30** |
| | | 423(W)×43.6(H)×447.2(D)mm, Approx. 8.7kg | | | | | | | |

| **Model** | | **60-25** | **80-19** | **100-15** | **150-10** | **300-5** | **400-3.8** | **600-2.6** |
|---|---|---|---|---|---|---|---|---|
| Rated output voltage (*1) | | 60V | 80V | 100V | 150V | 300V | 400V | 600V |
| Rated output current (*2) | | 25A | 19A | 15A | 10A | 5A | 3.8A | 2.6A |
| Rated output power | | 1500W | 1520W | 1500W | 1500W | 1500W | 1520W | 1560W |
| **RIPPLE AND NOISE (*5)** | | **60-25** | **80-19** | **100-15** | **150-10** | **300-5** | **400-3.8** | **600-2.6** |
| CVp-p(10 ~ 20MHz) p-p(*6) | | 60mV | 80mV | 80mV | 100mV | 150mV | 200mV | 300mV |
| CVrms(5Hz ~ 1MHz) r.m.s.(*7) | | 8mV | 8mV | 8mV | 10mV | 25mV | 40mV | 60mV |
| CCrms(5Hz ~ 1MHz) r.m.s. (*12) | | 75mA | 57mA | 45mA | 35mA | 25mA | 17mA | 12mA |
| **LOAD REGULATION** | | **60-25** | **80-19** | **100-15** | **150-10** | **300-5** | **400-3.8** | **600-2.6** |
| Voltage(*4) | | 8mV | 10mV | 12mV | 17mV | 32mV | 42mV | 62mV |
| Current (*11) | | 10mA | 8.8mA | 8mA | 7mA | 6mA | 5.76mA | 5.52mA |
| **LINE REGULATION** | | **60-25** | **80-19** | **100-15** | **150-10** | **300-5** | **400-3.8** | **600-2.6** |
| Voltage(*3) | | 8mV | 10mV | 12mV | 17mV | 32mV | 42mV | 62mV |
| Current (*3) | | 4.5mA | 3.9mA | 3.5mA | 3mA | 2.5mA | 2.38mA | 2.26mA |
| **ANALOG PROGRAMMING AND MONITORING** | | **60-25** | **80-19** | **100-15** | **150-10** | **300-5** | **400-3.8** | **600-2.6** |
| External Voltage Control Output Voltage | | Accuracy and linearity: ±0.5% of rated output voltage. | | | | | | |
| External Voltage Control Output Current | | Accuracy and linearity: ±1% of rated output current. | | | | | | |
| External Resistor Control Output Voltage | | Accuracy and linearity: ±1% of rated output voltage. | | | | | | |
| External Resistor Control Output Current | | Accuracy and linearity: ±1.5% of rated output current. | | | | | | |
| Output Voltage Monitor | | Accuracy: ±1% | | | | | | |
| Output Current Monitor | | Accuracy: ±1% | | | | | | |
| Shutdown Control | | Turns the output off with a LOW (0V to 0.5V) or short-circuit. | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Output On/Off Control | | Possible logic selections:<br>Turn the output on using a LOW (0V to 0.5V) or short-circuit, turn the output off using a HIGH (4.5V to 5V) or open-circuit.<br>Turn the output on using a HIGH (4.5V to 5V) or open-circuit, turn the output off using a LOW (0V to 0.5V) or short-circuit. | | | | | | |
| Alarm Clear Control | | Clear alarms with a LOW (0V to 0.5V) or short-circuit. | | | | | | |
| CV/CC/ALM/PWR ON/OUT ON indicator | | Photocoupler open collector output; Maximum voltage 30V, maximum sink current 8mA. | | | | | | |
| Trigger Out | | Maximum low level output = 0.8V; minimum high level output = 2V; Maximum source current = 8mA. | | | | | | |
| Trigger In | | Maximum low level input voltage = 0.8V; minimum high level input votage = 2V, Maximum sink current = 8mA. | | | | | | |
| **FRONT PANEL** | | **60-25** | **80-19** | **100-15** | **150-10** | **300-5** | **400-3.8** | **600-2.6** |
| Display, 4 digits<br>Voltage accuracy | 0.1% + | 120mV | 160mV | 200mV | 300mV | 600mV | 800mV | 1200mV |
| Current accuracy | 0.2% + | 75mA | 57mA | 45mA | 30mA | 15mA | 11.4mA | 7.8mA |
| Indications | | GREEN LED's: CV, CC, V, A, VSR, ISR, DLY, RMT, LAN, M1, M2, M3, RUN, Output ON | | | | | | |
| | | RED LED's: ALM, ERR | | | | | | |
| Buttons | | Lock/Local(Unlock), PROT(ALM_CLR), Function(M1), Test(M2), Set(M3), Shift, Output | | | | | | |
| Knobs | | Voltage, Current | | | | | | |
| USB port | | Type A USB connector | | | | | | |
| **TRANSIENT RESPONSE TIME(*10)** | | **60-25** | **80-19** | **100-15** | **150-10** | **300-5** | **400-3.8** | **600-2.6** |
| Transient Response Time | | 1ms | 1ms | 1ms | 2ms | 2ms | 2ms | 2ms |
| **OUTPUT RESPONSE TIME** | | **60-25** | **80-19** | **100-15** | **150-10** | **300-5** | **400-3.8** | **600-2.6** |
| Rise time (*8) | Rated load | 80ms | 150ms | 150ms | 150ms | 150ms | 200ms | 250ms |
| | No load | 80ms | 150ms | 150ms | 150ms | 150ms | 200ms | 250ms |
| Fall time (*9) | Rated load | 80ms | 150ms | 150ms | 150ms | 150ms | 200ms | 250ms |
| | No load | 1100ms | 1200ms | 1500ms | 2000ms | 2500ms | 3000ms | 4000ms |
| **PROGRAMMING AND MEASUREMENTS (RS-232/485, USB, LAN, GPIB)** | | **60-25** | **80-19** | **100-15** | **150-10** | **300-5** | **400-3.8** | **600-2.6** |
| Output Voltage Programming Accuracy | 0.05% + | 30mV | 40mV | 50mV | 75mV | 150mV | 200mV | 300mV |
| Output Current Programming Accuracy | 0.2% + | 25mA | 19mA | 15mA | 10mA | 5mA | 3.8mA | 2.6mA |
| Output Voltage Programming Resolution | | 2mV | 2.7mV | 3.4mV | 5.2mV | 10.2mV | 13.6mV | 20.4mV |
| Output Current Programming Resolution | | 0.8mA | 0.65mA | 0.5mA | 0.34mA | 0.19mA | 0.13mA | 0.09mA |
| Output Voltage Measurement Accuracy | 0.1% + | 60mV | 80mV | 100mV | 150mV | 300mV | 400mV | 600mV |
| Output Current Measurement Accuracy | 0.2% + | 50mA | 38mA | 30mA | 20mA | 10mA | 7.6mA | 5.2mA |
| Output Voltage Measurement Resolution | | 2mV | 2.7mV | 3.4mV | 5.2mV | 10.2mV | 13.6mV | 20.4mV |
| Output Current Measurement Resolution | | 0.8mA | 0.65mA | 0.5mA | 0.34mA | 0.19mA | 0.13mA | 0.09mA |
| **TEMPERATURE COEFFICIENCE** | | **60-25** | **80-19** | **100-15** | **150-10** | **300-5** | **400-3.8** | **600-2.6** |
| Voltage & Current | | 100ppm/℃ after a 30 minute warm-up | | | | | | |
| **REMOTE SENSE COMPENSATION VOLTAGE(TWO WIRE)** | | **60-25** | **80-19** | **100-15** | **150-10** | **300-5** | **400-3.8** | **600-2.6** |
| Voltage | | 3V | 4V | 5V | 5V | 5V | 5V | 5V |
| **PROTECTION FUNCTION** | | **60-25** | **80-19** | **100-15** | **150-10** | **300-5** | **400-3.8** | **600-2.6** |
| Over Voltage Protection (OVP) | Setting range | 5 - 66V | 5 - 88V | 5 - 110V | 5 - 165V | 5 - 330V | 5 - 440V | 5 - 660V |
| | Setting accuracy | 600mV | 800mV | 1000mV | 1500mV | 3000mV | 4000mV | 6000mV |
| Over Current Protection (OCP) | Setting range | 2.5 - 27.5A | 1.9 - 20.9A | 1.5 - 16.5A | 1 - 11A | 0.5 - 5.5A | 0.38 - 4.18A | 0.26 - 2.86A |
| | Setting accuracy | 500mA | 380mA | 300mA | 200mA | 100mA | 76mA | 52mA |
| Under Voltage Limit (UVL) | Setting range | 0 - 63V | 0 - 84V | 0 - 105V | 0 - 157.5V | 0 - 315V | 0 - 420V | 0 - 630V |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Over Temperature Protection (OHP) | Operation | Turn the output off. | | | | | | |
| Incorrect Sensing Connection Protection (SENSE) | Operation | Turn the output off. | | | | | | |
| Low AC Input Protection (AC-FAIL) | Operation | Turn the output off. | | | | | | |
| Shutdown (SD) | Operation | Turn the output off. | | | | | | |
| Power Limit (POWER LIMIT) | Operation | Over power limit. | | | | | | |
| | Value (fixed) | Approx. 105% of rated output power | | | | | | |
| **INTERFACE CAPABILITIES** | | **60-25** | **80-19** | **100-15** | **150-10** | **300-5** | **400-3.8** | **600-2.6** |
| USB | | TypeA: Host, TypeB: Slave, Speed: 1.1/2.0, USB Class: CDC(Communications Device Class) | | | | | | |
| LAN | | MAC Address, DNS IP Address, User Password, Gateway IP Address, Instrument IP Address, Subnet Mask | | | | | | |
| RS-232 / RS-485 | | Complies with the EIA232D / EIA485 Specifications | | | | | | |
| GPIB (Factory Option) | | SCPI - 1993, IEEE 488.2 compliant interface | | | | | | |
| **ISOLATED ANALOG CONTROL INTERFACE (Factory Option)** | | **60-25** | **80-19** | **100-15** | **150-10** | **300-5** | **400-3.8** | **600-2.6** |
| Voltage Control | | Using 0-5V or 0-10V signals for programming and measurement | | | | | | |
| Current Control | | Using 4-20mA current signals for programming and measurement | | | | | | |
| **ENVIRONMENTAL CONDITIONS** | | **60-25** | **80-19** | **100-15** | **150-10** | **300-5** | **400-3.8** | **600-2.6** |
| Operaing Temperature | | 0° C to 50° C (*14) | | | | | | |
| Storage Temperature | | -25° C to 70° C | | | | | | |
| Operating Humidity | | 20% to 85% RH; No condensation | | | | | | |
| Storage Humidity | | 90% RH or less; No condensation | | | | | | |
| Altitude | | Maximum 2000m | | | | | | |
| **INPUT CHARACTERISTICS** | | **60-25** | **80-19** | **100-15** | **150-10** | **300-5** | **400-3.8** | **600-2.6** |
| Norminal Input Rating | | 100Vac to 240Vac, 50Hz to 60Hz, single phase | | | | | | |
| Input Voltage Range | | 85Vac ~ 265Vac | | | | | | |
| Input Frequency Range | | 47Hz ~ 63Hz | | | | | | |
| Maximum Input Current | 100Vac / 200Vac(A) | 21 / 11 | | | | | | |
| Inrush Current | | Less than 50A. | | | | | | |
| Maximum Input Power | | 2000VA | | | | | | |
| Power Factor | 100Vac / 200Vac | 0.99 / 0.98 | | | | | | |
| Hold-up Time | | 20ms or greater | | | | | | |
| Efficiency (*13) | 100Vac / 200Vac(%) | 84 / 87 | 84 / 87 | 84 / 87 | 84 / 87 | 84 / 87 | 84 / 87 | 84 / 87 |
| **DIMENSIONS & WEIGHT** | | **60-25** | **80-19** | **100-15** | **150-10** | **300-5** | **400-3.8** | **600-2.6** |
| | | 423(W)×43.6(H)×447.2(D)mm, Approx. 8.7kg | | | | | | |

**Notes:**

(*1) Minimum voltage is guaranteed to maximum 0.2% of the rated output voltage.

(*2) Minimum current is guaranteed to maximum 0.4% of the rated output current.

(*3) At 85 ~ 132Vac or 170 ~ 265Vac, constant load.

(*4) From No-load to Full-load, constant input voltage. Measured at the sensing point in Remote Sense.

(*5) Measure with JEITA RC-9131B (1:1) probe

(*6) Measurement frequency bandwidth is 10Hz to 20MHz.

(*7) Measurement frequency bandwidth is 5Hz to 1MHz.

(*8) From 10% to 90% of rated output voltage, with rated resistive load.

(*9) From 90% to 10% of rated output voltage, with rated resistive load.

(*10) Time for output voltage to recover within 0.5% of its rated output for a load change from 10 to 90% of its rated output current. Voltage set point from 10% to 100% of rated output.

(*11) For load voltage change, equal to the unit voltage rating, constant input voltage.

(*12) For 6V~20V model the ripple is measured at 2V ~ rated output voltage and full output current. For other models, the ripple is measured at 10 ~ 100% output voltage and full output current.

(*13) At rated output power.

(*14) If install the front panel filter kit, the temperature is guaranteed to 40˚C.