

# 200Watts Single Output LED Driver



### Features:

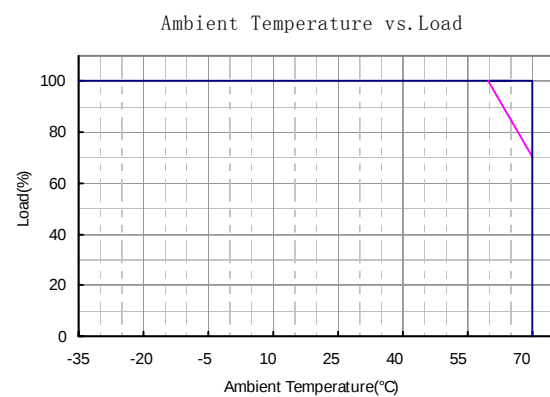
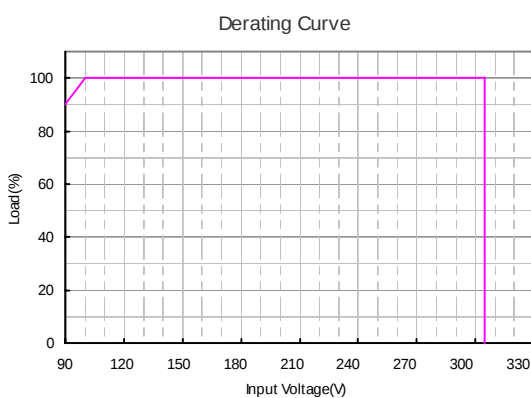
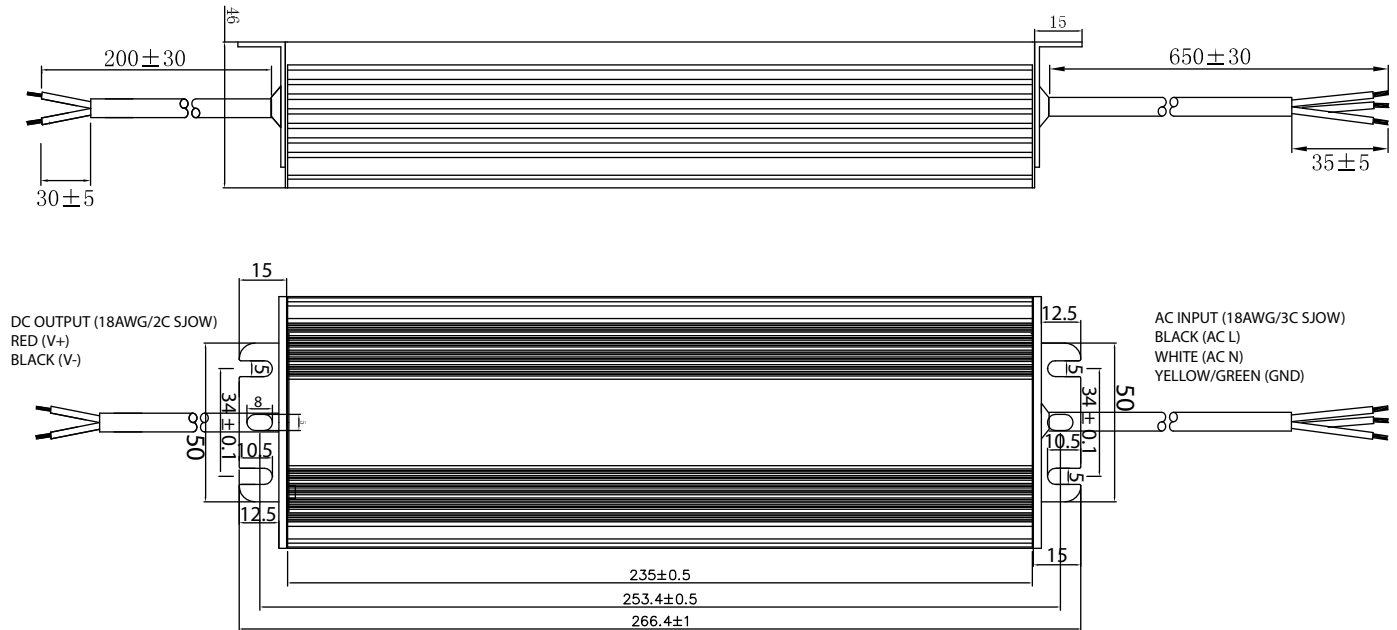
- Constant Current Design
- Universal AC input/ Full Range
- Built-in Active PFC function, PF 0.99 Typical
- High Efficiency (Up to 92%)
- Output Protections: OVP/SCP/OTP
- Lightning Protection
- Waterproof (IP67)
- 5 Year Warranty



| Model                                        |        | PLC-200S070                                                                                                                                                                                                                                                            | PLC-200S105 | PLC-200S140 | PLC-200S175 | PLC-200S210 | PLC-200S245 | PLC-200S280 | PLC-200S315 | PLC-200S350 | PLC-200S420 | PLC-200S490 | PLC-200S560 | PLC-200S630 | PLC-200S833 |
|----------------------------------------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Output Characteristics                       |        |                                                                                                                                                                                                                                                                        |             |             |             |             |             |             |             |             |             |             |             |             |             |
| Rated Current                                |        | 0.70A                                                                                                                                                                                                                                                                  | 1.05A       | 1.40A       | 1.75A       | 2.10A       | 2.45A       | 2.80A       | 3.15A       | 3.50A       | 4.20A       | 4.90A       | 5.60A       | 6.30A       | 8.33A       |
| Voltage Range                                |        | 171~285V                                                                                                                                                                                                                                                               | 114~190V    | 85~142V     | 68~114V     | 57~95V      | 48~81V      | 42~71V      | 38~63V      | 34~57V      | 28~47V      | 24~40V      | 21~35V      | 19~32V      | 14~24V      |
| Ripple and Noise (max) <small>Note 1</small> |        | ±10% Vo                                                                                                                                                                                                                                                                |             |             |             |             |             |             |             |             |             |             |             |             |             |
| Voltage Accuracy                             |        | ±5% Vo                                                                                                                                                                                                                                                                 |             |             |             |             |             |             |             |             |             |             |             |             |             |
| Line Regulation                              |        | ±1% Vo                                                                                                                                                                                                                                                                 |             |             |             |             |             |             |             |             |             |             |             |             |             |
| Load Regulation                              |        | ±3% Vo                                                                                                                                                                                                                                                                 |             |             |             |             |             |             |             |             |             |             |             |             |             |
| Rise Time                                    |        | 20mS Max @ Rated Load                                                                                                                                                                                                                                                  |             |             |             |             |             |             |             |             |             |             |             |             |             |
| Hold-up Time (Typ.)                          |        | 8.5mS Min (110VAC input, full load), 10mS Min (220VAC input, full load)                                                                                                                                                                                                |             |             |             |             |             |             |             |             |             |             |             |             |             |
| Input Characteristics                        |        |                                                                                                                                                                                                                                                                        |             |             |             |             |             |             |             |             |             |             |             |             |             |
| Voltage Range                                |        | 90VAC~305VAC                                                                                                                                                                                                                                                           |             |             |             |             |             |             |             |             |             |             |             |             |             |
| Frequency Range                              |        | 47Hz-63Hz                                                                                                                                                                                                                                                              |             |             |             |             |             |             |             |             |             |             |             |             |             |
| Power Factor (Typical)                       | 110VAC | >0.99                                                                                                                                                                                                                                                                  | >0.99       | >0.99       | >0.99       | >0.99       | >0.99       | >0.99       | >0.99       | >0.99       | >0.99       | >0.99       | >0.99       | >0.99       | >0.99       |
|                                              | 220VAC | >0.95                                                                                                                                                                                                                                                                  | >0.95       | >0.95       | >0.95       | >0.95       | >0.95       | >0.95       | >0.95       | >0.95       | >0.95       | >0.95       | >0.95       | >0.95       | >0.95       |
| Efficiency (Typical)                         |        | 92%                                                                                                                                                                                                                                                                    | 92%         | 92%         | 92%         | 91%         | 91%         | 91%         | 91%         | 91%         | 91%         | 91%         | 91%         | 91%         | 90%         |
| AC Current (max)                             |        | 1.0A @ 100-277VAC Input Full Load                                                                                                                                                                                                                                      |             |             |             |             |             |             |             |             |             |             |             |             |             |
| Inrush Current (max)                         |        | 75A @ 230VAC, 25°C                                                                                                                                                                                                                                                     |             |             |             |             |             |             |             |             |             |             |             |             |             |
| Leakage Current                              |        | 1.0mA max @ 277VAC                                                                                                                                                                                                                                                     |             |             |             |             |             |             |             |             |             |             |             |             |             |
| Protection                                   |        |                                                                                                                                                                                                                                                                        |             |             |             |             |             |             |             |             |             |             |             |             |             |
| Over Temperature (OTP)                       |        | 110°C (Temperature of internal components); shut down, auto recover after the temperature decreases                                                                                                                                                                    |             |             |             |             |             |             |             |             |             |             |             |             |             |
| Over Voltage (OVP) <small>Note 2</small>     |        | 1.2~1.4Vo                                                                                                                                                                                                                                                              |             |             |             |             |             |             |             |             |             |             |             |             |             |
| Short Circuit (SCP)                          |        | Long-term mode, auto recovery                                                                                                                                                                                                                                          |             |             |             |             |             |             |             |             |             |             |             |             |             |
| Environmental Characteristics                |        |                                                                                                                                                                                                                                                                        |             |             |             |             |             |             |             |             |             |             |             |             |             |
| Operating Temperature                        |        | -35°C~70°C                                                                                                                                                                                                                                                             |             |             |             |             |             |             |             |             |             |             |             |             |             |
| Operating Relative Humidity                  |        | 10% RH to 100% RH                                                                                                                                                                                                                                                      |             |             |             |             |             |             |             |             |             |             |             |             |             |
| Storage Temperature                          |        | -40°C~85°C, 5% to 100% RH non-condensing                                                                                                                                                                                                                               |             |             |             |             |             |             |             |             |             |             |             |             |             |
| Vibration                                    |        | 10 to 300Hz sweep at constant acceleration of 1.0G(Breadth: 3.5mm) for 1 Hour for each of the perpendicular axes X, Y, Z                                                                                                                                               |             |             |             |             |             |             |             |             |             |             |             |             |             |
| Waterproof Rating                            |        | IP67                                                                                                                                                                                                                                                                   |             |             |             |             |             |             |             |             |             |             |             |             |             |
| Safety Standards                             |        | UL8750, Compliance to UL1012 UL935, IEC61347                                                                                                                                                                                                                           |             |             |             |             |             |             |             |             |             |             |             |             |             |
| Withstand Voltage                            |        | L/N-GND: 4kV, L-N: 2kV                                                                                                                                                                                                                                                 |             |             |             |             |             |             |             |             |             |             |             |             |             |
| Isolation Resistance                         |        | I/P-O/P: >100M Ohms / 500VDC / 25°C / 70% RH                                                                                                                                                                                                                           |             |             |             |             |             |             |             |             |             |             |             |             |             |
| EMC Emission                                 |        | Compliance to EN55022(CISPR22) Class B, EN61000-3-2 Class A, EN61000-3-3                                                                                                                                                                                               |             |             |             |             |             |             |             |             |             |             |             |             |             |
| EMC Immunity                                 |        | Compliance to EN61000-3-2, 3 EN61000-4-2, 3, 4, 5, 6, 8, 11, EN61547                                                                                                                                                                                                   |             |             |             |             |             |             |             |             |             |             |             |             |             |
| Characteristics                              |        |                                                                                                                                                                                                                                                                        |             |             |             |             |             |             |             |             |             |             |             |             |             |
| Life Time                                    |        | More than 50,000Hrs (25°C, 80% Load)                                                                                                                                                                                                                                   |             |             |             |             |             |             |             |             |             |             |             |             |             |
| MTBF (MIL-HDBK-217F)                         |        | More than 320,000Hrs (25°C, 80% Load)                                                                                                                                                                                                                                  |             |             |             |             |             |             |             |             |             |             |             |             |             |
| Dimension (LxWxH)                            |        | 266.4x79.5x46mm                                                                                                                                                                                                                                                        |             |             |             |             |             |             |             |             |             |             |             |             |             |
| Note                                         |        | 1. Ripple & Noise: Measured by 20 MHz bandwidth oscilloscope and the output paralleled with a 0.1 uF ceramic capacitor and a 10 uF electrolytic capacitor.<br>2. Latch Mode: The power supply shall return to normal operation only after the power is turned on again |             |             |             |             |             |             |             |             |             |             |             |             |             |

## MECHANICAL SPECIFICATIONS

**UNIT: mm**



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