

# RPM-130-AC Series

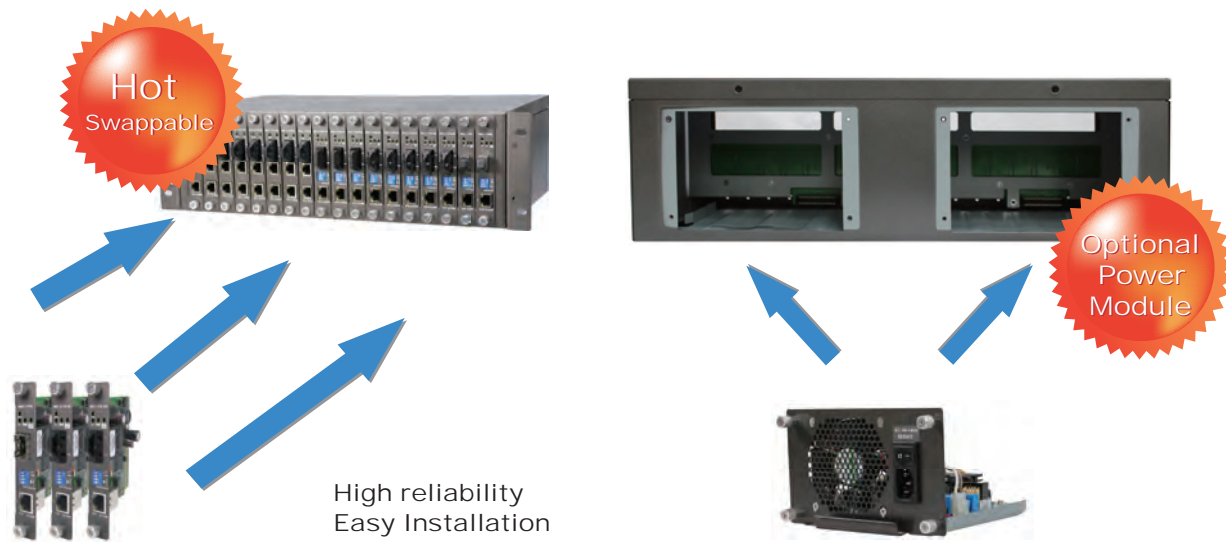
➔ 130Watts single output industrial chassis power supply

## Features

- Universal power input support 100 to 240VAC
- High power conversion efficiency
- Supports over voltage protection
- Continuous short circuit protection
- Supports over temperature protection
- Active PFC for EN61000-3-2 class A & D compliance
- MTBF 400Khrs



## Application



**Airflow Direction**

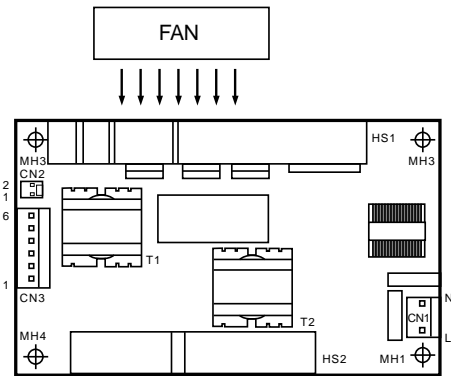
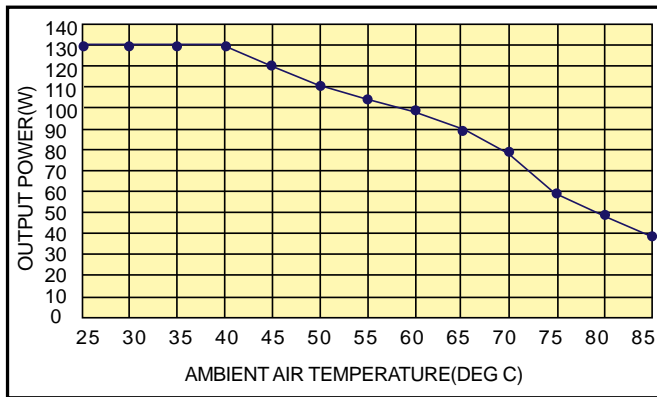


Figure 2: Out power vs Temperature with Forced Air Cooling with Airflow Direction From HS1 to HS2 Vin=90Vac

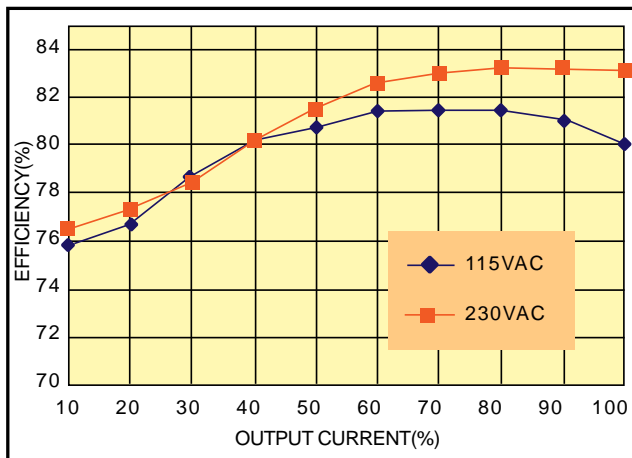
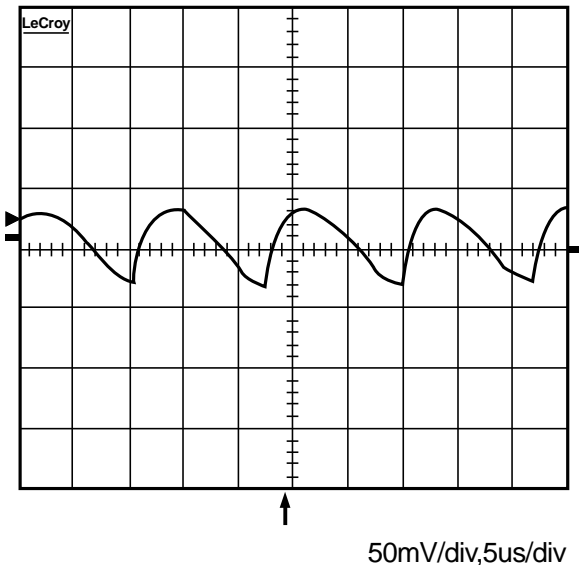


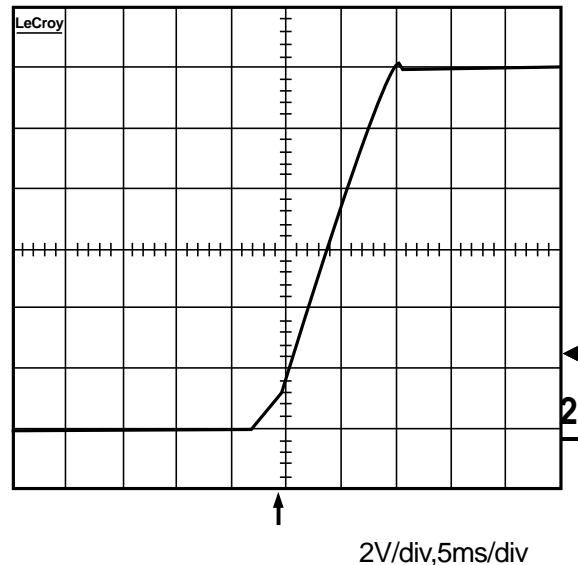
Figure 3: Efficiency vs Load (Vo=12V)

**Performance**

1. Output Ripple



2. Output turn on wave form



## Specifications

| O/Ring Chassis Power Supply Model              | RPM-130-AC_US/EU   |
|--|--|
| <b>Physics</b>                                 |  |
| Power  | Single output with maximum 130Watts (cooling fan included)   |
| <b>Input Requirements</b>                      |  |
| Operating Voltage Ranges                       | 100 ~ 240VAC   |
| Line Frequency Range                           | 47 ~ 63 Hz   |
| Steady Current                                 | 3.3 Arms max   |
| Inrush Current (cold start 25oC)               | 80A max  |
| Leakage Current (DC-DC exclude)                | 3.5mA max  |
| <b>Output Requirements</b>                     |  |
| Specified O/P Voltage                          | 12VDC  |
| Current  | Max. : 10.8A   |
| Ripple & Noise                                 | 120mV  |
| Line Regulation                                | +1% ~ -1%  |
| Load Regulation                                | +1% ~ -1%  |
| <b>Protection Requirements</b>                 |  |
| Over-Voltage Protection                        | +14.5V / -2.5V   |
| Over-Temperature Protection                    | 130oC (typical)  |
| Over-Current Protection                        | 10.8 ~ 21.6A   |
| No Load Operation                              | Present  |
| Short Circuit Protection                       | Present  |
| <b>General Requirements</b>                    |  |
| Efficiency                                     | 80% (typical)  |
| Hold-Up Time                                   | 20ms (typical)   |
| Temperature Coefficient                        | ±0.02% oC (typical)  |
| <b>Environmental</b>                           |  |
| Storage Temperature                            | -40 to 85°C (-40 to 185°F)   |
| Operating Temperature                          | -10 to 70°C (14 to 158°F) (Please reference Figure 2 for derating curve)   |
| Operating Humidity                             | 0% to 95% Non-condensing   |
| Vibration                                      | Operating vibration : 1Grms, 5 to 500Hz, random vibration, 30 minutes along X, Y, Z axis.<br>Non-Operating vibration : 2Grms, 5 to 500Hz, random vibration, 30 minutes along X, Y, Z axis                                      |
| Shock  | Operating Shock : 10G maximum, 1/2 sine wave, 11 msec in any axis.<br>Non-Operating Shock : 20G maximum, 1/2 sine wave, 11 msec in any axis.   |
| <b>Regulatory Approvals</b>                    |  |
| EMI  | CISPR 22 class A, EN55022 class A, FCC parts 15 class A  |
| EMS  | EN61000-4-2 (ESD), EN61000-4-3 (RS), EN61000-4-4 (EFT), EN61000-4-5 (Surge), EN61000-4-6 (CS), EN61000-4-8, EN61000-4-11, IEC-61000-3-2 class A & class D  |
| Safety   | UL60950-1, EN60950-1, CUL : CAN/CSA C22.2 No.60950-1<br>HI-POT (L,N to DC output) : 4242VDC, 1 minute, Ilimit : 8mA<br>HI-POT (L,N to FG) : 2121VDC, 1 minute, Ilimit : 8mA<br>I.R. : 50MQ (min. at room temperature) / 500VDC |
| MTBF (Hours)<br>(MIL-HDBK-217F2, GB, GC, 25°C) | 352,648  |
| Warranty                                       | 2 years  |

## Ordering Information

|   | Model Name    | Description   |
|---|---------------|---|
| Available Model   | RPM-130-AC_US | 1130W rack mount 12VDC/10.8A Power Supply Module with universal 100 to 240VAC input, US power cord  |
|   | RPM-130-AC_EU | 130W rack mount 12VDC/10.8A Power Supply Module with universal 100 to 240VAC input, EU power cord   |
| <b>Packing List</b> <ul style="list-style-type: none"> <li>RPM-130-AC</li> <li>Quick Installation Guide</li> <li>AC power cord</li> </ul> |               | <b>Optional Accessories (Can be purchased separately)</b> <ul style="list-style-type: none"> <li>FPC series : Fiber Patch cord</li> </ul> |