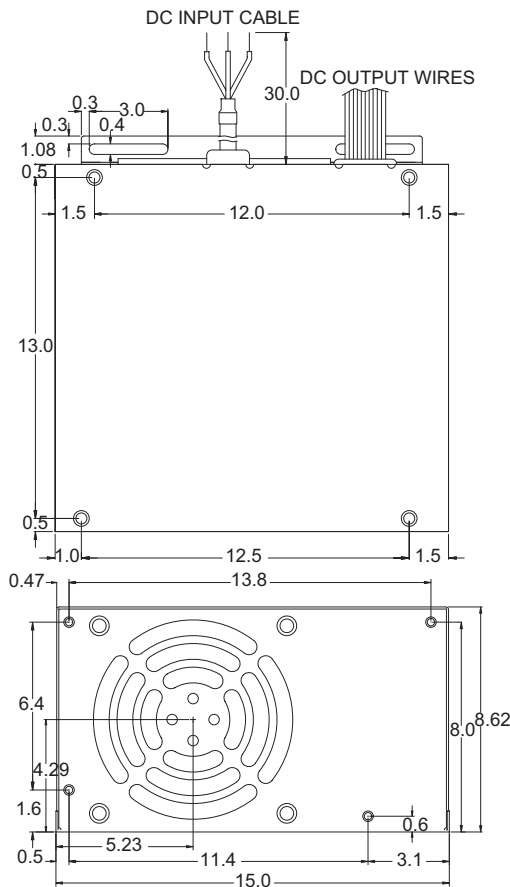


Power Supply

MPD-830R

300W DC/DC ATX Power Supply



Output Voltage	Min. Load	Rated Load	Max. Load	Voltage Accuracy
+5V	2A	25A	30A	4.8~5.2V
+12V	0.1A	10A	15A	11.4~12.6V
-12V	0A	1A	2A	-11.4~-12.6V
-5V	0A	1A	2A	-4.75~-5.25V
+3.3V	0A	8A	15A	3.13~3.4V
+5Vsb	0A	0.72A	1.2A	4.75~5.25V

★ Specifications

- * **Input Voltage:** The range of input voltage is from 72~136VDC
- * **Input Current:** The maximum input current is 5A at 110VDC input
- * **Inrush Current:** The inrush current will not exceed 10A at 110VDC input cold start, 25°C
- * **Load Range:** At factory, all outputs in 60% rated load condition; the +5V output is set to between 4.80V and 5.20V. The other outputs are checked to be within the specified voltage accuracy range
- * **Ripple And Noise:** The peak to peak ripple and noise for +5V, +3.3V outputs are less than 50mV, and for the other output are less than 100mV at rated load. Measuring is done by 15MHz bandwidth limited oscilloscope and terminated each output with a 0.47uF capacitor electrolysis capacitor at rated load, nominal line
- * **Line Regulation:** The output line regulation for each output is less than +/-1% while measuring at rated load and -40~-72VDC input voltage changing
- * **Load Regulation:** The output voltage load regulation is less than the values in the following table by changing each output load +/-40% from 60% from rated load, and keep other outputs at 60% rated load
- * **Output Power:** The total DC continuous power shall be kept within 300W ambient temperature of 40°C below, and input voltage at 110VDC. The maximum, total combined output power on the 3.3V and 5V rails is 150W
- * **Power On Signal:** This TTL compatible signal (active low) is use to switch ON the main output. When power on is disconnected from secondary common, all outputs except +5Vsb shall turn off
- * **Power Good Signal:** When power start-up, the power good signal will increase between 100ms to 500ms after all output DC voltages are within regulation limits
- * **Power Fail Signal:** The power fail signal will fall at least 1ms before any of the output voltages lower than the regulation limits
- * **Efficiency:** The efficiency is higher than 65% while measuring at nominal line and rated output
- * **Altitude:** Will operate properly at any altitude between 0 to 10000ft
- * **Protection:**
Over Voltage: For some reasons the power supply might fail to control itself, the build-in crowbar circuit will automatically shut down the outputs to avoid damaging the external circuits. The trip point of O.V.P. circuit is around 5.7V to 7.0V
Short Circuit: The power supply will go into hiccup mode function against short circuit or over load conditions. If the faults condition removed, the power supply will restart automatically
- * **Temperature:** 0~70°C, -20°C can start up, derating from 50°C (operating); -40~+75°C (storage)
- * **Humidity:** The power supply can operate from 5% humidity to 95% humidity non-condensing at 40°C
- * **Connectors:**
DC Connectors: 3 positions terminal blocks
ATX: Molex 39-01-2200 or equivalent
Disk Drive: AMP 1-480424-0 or equivalent
3.5" Floppy Driver: AMP 171822-4 or equivalent
P4: Molex 39-01-2045 or equivalent
- * **Dimensions:** 14.0 x 15.0 x 8.62 cm; Tolerance specified is +/-0.4mm between mounting holes and +/-0.8mm for other dimensions

Safety Standards

- * **Safety:** IEC 60950, EN 50155: 2001 (Railway applications. Electronic equipment used on rolling stock)
- * **EMI:** FCC class "B", EN 55022 class "B", EN 55011 class "B"
- * **EMS:** EN 61000-4-2, EN 61000-4-3, EN 61000-4-4, EN 61000-4-5, EN 61000-4-6, EN 61000-4-11

The Industrial PC Authority



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