



High Power Cabinet System Power Supply For Multi-Industry Applications

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With continuous technological innovation and the expansion of application fields, high-power power supplies are widely used in industrial automation control, communications, medical, military, laboratory research, aerospace, and other fields due to their characterized high efficiency, high power density, and stable reliability. Notably, in scientific research fields that utilize pulse power technology such as particle accelerators, electromagnetic emission, electromagnetic propulsion, and microwave sources, the average power demand of power supply system typically ranges from several hundred kilowatts to several megawatts.

MEAN WELL continues to develop high-power switching power supplies, with individual power units ranging from 3.2kW to 30kW. The output voltage/current can be flexibly adjusted through the PV/PC functions or configured and monitored through communication interfaces such as CANBus, PMBus, and MODbus. There are also two heat dissipation methods: air cooling and water cooling. The following Table 1 lists MEAN WELL's high-power power supply products:



Table 1 High-power Power Supply Products

Product Series	Input Voltage	Output Voltage	Rated Power	Function	Heat Dissipation Method
NCP-3200	1φ 90 ~ 264VAC	24/ 48/ 380VDC	3.2kW	PV, PC, PMBus, CANBus, parallel, auxiliary power supply, remote control, alarm signal, etc.	Air cooling
PHP-3500		24/ 48/ 115/ 230/ 380VDC	3.5kW		Water cooling
RST-5000	3φ 3-wire / Δ 196 ~ 305VAC or 3φ 4-wire / Y 340 ~ 530VAC	24/ 36/ 48VDC	5kW	PV, PC, parallel, auxiliary power supply, remote control, alarm signal, etc.	Air cooling
RST-10000			10kW		Air cooling
RST-7K5	115/ 230/ 380VDC	7.5kW	PV, PC, parallel, auxiliary power supply, remote control, alarm signal, etc.	Air cooling or water cooling	Air cooling or water cooling
RST-15K			15kW		
SHP-10K	3φ 3-wire / 340 ~ 530VAC	55/ 115/ 230/ 380VDC	10kW	PV, PC, PMBus, CANBus, MODBus, parallel, auxiliary power supply, remote control, alarm signal, etc.	Air cooling or water cooling
SHP-30K			30kW		Air cooling

Table 1. High-Power Power Supply Products

In addition, MEAN WELL high-power power supplies also feature parallel functionality. When combined with MEAN WELL 19-inch cabinets (available in 15U, 22U, 30U, 35U, and 42U), different output voltages and powers can be configured according to the needs of various industrial applications, forming ultra-high-power rack-mounted system power supplies. At the same time, with the power management module CMU2C, customers can easily control the output parameters of the system power supply remotely and monitor the power supply's working status. ([LINK](#))

As shown in Figure 1, for the power supply application of the weather radar system, and the load is a radio frequency power amplifier. MEAN WELL RST-10000-36 + 15U are used in the cabinet to form a complete weather radar system power supply, using analog alarm signals to monitor the working status of the power supply.



Figure 1 Weather Radar System Power Supply

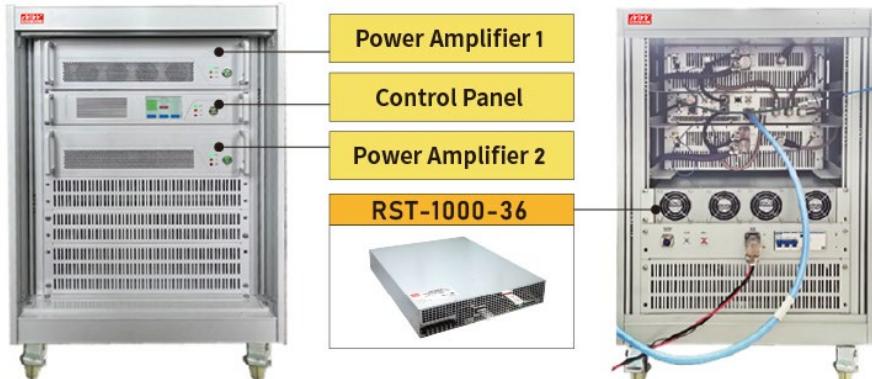


Figure 1. Weather Radar System Power Supply

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