Redundant Power Supply with High-Efficiency and High-Reliability



1U size redundant power supply "FR1UA-350P series" has been added to our lineup.

FR1UA series is a redundant power supply which will be optimum high-reliability power supply required from devices such as servers.

This power supply fulfills high-efficiency, 89% max., as well.

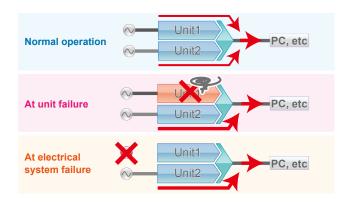




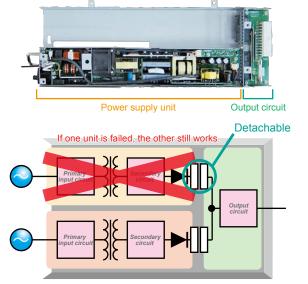
Redundant Power Supply with Hot Swapping Function

FR1UA-350P series is the redundant power supply which provides power to devices with parallel operation of two same power supply units. If failure occurs on one of power supply units, the other unit supports all the power required. Since each unit can connect to an AC cable, troubles on electrical system do not stop FR1UA-350P from running if each unit is connected to different electrical systems.

Hot swapping is also available with this power supply, so the defective unit can be replaced while it is running.

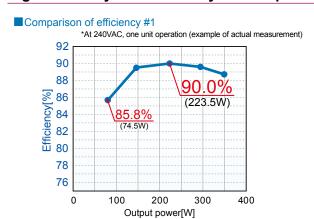


Internal picture



High-Efficiency, 89% max. (90% max. when only one power supply unit is used)

High-efficiency is achieved by our unique circuit

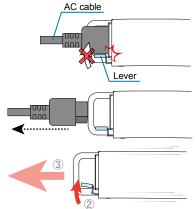


■Comparison of efficiency #2 *At 240VAC, two units operation (example of actual measurement) 92 90 88 89.1% 86 Efficiency[%] (297.6W) 84 82 80 78 (74.6W) 76 0 100 200 400 Output power[W]

Safety for incorrect operation

Prevention mechanism for incorrect operation of power supply

- When AC cable is plugged, the power supply unit cannot be detached because the lever is locked.
- ② Pull out the AC cable and push up the lever.
- ③ The unit and the exterior chassis are released from the lock, and the unit can be detached.



Prevent the AC cable from being pulled out accidentally



Product Outline

Output Specification

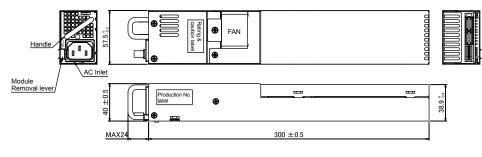
Model name	FR1UA-350P-AAS (12V05S)				
Input voltage	85-264VAC (worldwide range, with PFC)				
Output voltage	+12V	+5VSB			
Max. current / max power	24A	2.0A			
	288W	10W			
Peak current / peak power	29A	2.0A			
	348W	10W			
	Total 348W				
Min. current	0A	0A			
Size W×H×D	120×41[<mark>1U</mark>]×350(374 [*])mm				

*Including projections

- **♦** Easily embedded into 1U racks (41 mm height)
- ♦ 5VSB output available
- ♦ Various safety grades certified
 UL60950, CSA60950(c-UL) certified, CCC will be certified
- ♦ Various input/output signals available
 - ■Input signal •Output on/off control signal •LED_OFF signal
 - Output signal •Normal output signal •Fan alarm signal •PS_connection signal
- ♦ Status of each unit is indicated with LED
- **♦** RoHS compliant

Outline Drawing

Power supply unit



Connector specification

Connector name	Pin No.	Function	Pin No.	Function
5569-24A (Molex)	1	+5VSB	13	+5VS GND
	2	REMOTE_ON_B	14	POWER_GOOD_A
	3	+12V	15	+12V
	4	+12V	16	+12V
	5	+12V	17	+12V
	6	GND	18	GND
	7	GND	19	GND
	8	GND	20	GND
	9	FAN_FG_A	21	PSU_EXIST_A
	10	LED_OFF_A	22	REMOTE_ON_A
	11	LED_OFF_B	23	POWER_GOOD_B
	12	FAN_FG_B	24	PSU_EXIST_B

Exterior chassis + power supply unit

