Nipron Product News

Long life, Low noise OZP series AC-DC general purpose SW' power supply





# Product lineup

	Series Name	Output	Output Current			D I	
		Voltage	at natural	at forced air cooling	Peak	Remarks	
	OZP-120-12/15	+12V	10A	12.5A	15A	+12V/+15V output selection	
		+15V	8A	10A	12A	system	
	OZP-120-24	+24V	5A	6.3A	9A	Blakout backup mode is available.	
	OZP-170-12/15	+12V	14A	17.5A	22.5A	+12V/+15V output selection	
		+15V	11.2A	14A	18A	system	
	OZP-170-24	+24V	7A	8.8A	12.5A	Blakout backup mode is available.	

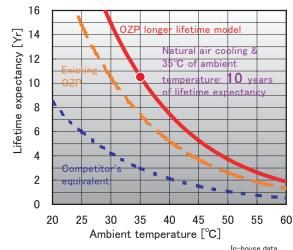
Even longer lifetime! for OZP series of longlife AC-DC single output SW' power supply OZP-170 realizes amazing 10-year lifetime as Fanless power supply goes. Moreover, Open frame model (no chassis/cover) of OZP series is LOW NOISE power supply to satisfy VCCI Class B (Conducted emission and Radiant noise) without external noise filters.

# Amazing 10-year lifetime

This summer, from July production in 2008, OZP series extends its lifetime even longer to 10-year of lifetime expectancy for OZP-170 at the conditions below. Thus, it secures longlife at severe industrial temperature environment resulting in reduction of maintenace work.

pron contributes to global environmental improvement with long-life design policy (10 years +) by deceasing industri

# Lifetime expectancy curve



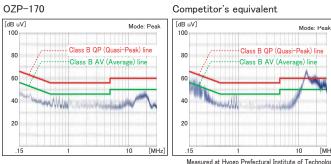
Measurement conditions Input voltage: 100V Output power: 150W Chassis/Cover: Non Installation direction Side direction (see the Longer lifetime for OZP-120 series as well, Also Chassis & Cover installation gives you longer lifetime; Lifetime data is on our URL and catalogs as needed.

# Low Noise

Open frame model (no chassis/cover) of OZP series is LOW NOISE power supply to satisfy VCCI Class B (Conducted emission and Radiant noise) without external noise filter

Conducted emission

The noise that sw' power supply emitts along AC line



Measurement conditions Model: OZP-170-12/15-J00 Input voltage: 240V Output power: 150W Installation (A) (Standard installatio direction) Output voltage: 12V Chassis/Cover: Non Installation direction: Standard (see the drawing

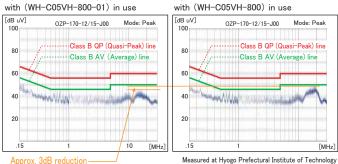
Further noise reduction with cable equipped with core;

Input cable with core equipped is ready assuming various power supply installation environments for users to easily reduce noises.

Input cable with core. Model: WH-C05VH-800-01

Input cabel without core

Input cable with core equipped with (WH-C05VH-800-01) in use



Radiant noise

Radiant noise The noise that is emitted as radio waves when SW' power supply operates.

OZP-170 Competitor's equivalent [dB(uV/m)]

OZP-170 even for open frame unit (no chassis/cover) satisfies Class B without external noise filter

Measurement coditions Model: 0ZP-170-12/15-J00 Installation (A Input voltage: 100V Output power: 150W Standard direc Output voltage: 12V Chassis/Cover: Non Installation direction: Standard (see the mmm drawingon the right)

# Other features

High Efficiency
High efficiency of 86% typical has been achieved (OZP-170-24 at AC 200V and rated load) by power loss reduction brought by optimized design of every component and new device adoption.

Compact & High power

Higher power! in comparison with competitor's equivalent OZP-120 series:

Continuous 120W (natural air cooling), 150W (forced air cooling), Peak 180 to 216W OZP-170 series:

Continuous 168W (natural air cooling), 210W (forced air cooling), Peak 270 to 300W

Double-sided PWBs with through holes Double-sided PWBs with through holes for industrial use to resolve solder cracks in Lead-free process; competitor's equivalent power suppy usually adopt single-sided PWBs.



Solder crack (single-sided PWB

Output voltage settable resistor equipped as standard: More stable system operation by line-drop compensation Settable up to approx. 29V for 24V output type and usable to charging source for Lead-acid battery

Backup operation at blackout With battery package connected, 24V output type can be backed up at AC failure.



Output ON/OFF control function (RC signal) equipped as standard; Output ON/OFF control is available by Remote terminal (RC signal)

12V/15V output with sellectable system

12V or 15V is sellectable by shorting plug; customers can integrate systems for better control of inventories.

3 types of Input/Output terminals

3 types of Input/Output termials; Connector, European terminal and Block terminal are lined up







Choice from Chassis and Cover

Line up of 3 types, Open frame type, With Cassis type, and



For further details about other features, refer to Nipron general catalog, page "C-E80."

If you need the catalog, contact us please.

### **Applications**

### As constant current source

This is an example in which OZP-120-12/15 has been modified to constant current source used as charger of Lead-acid battery (constant current hold-down point is settable.

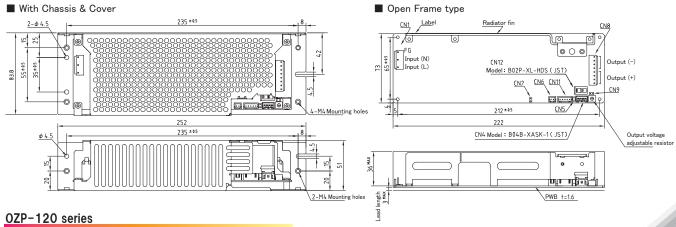
Constant current hold-down curve 16 12V output type QZP-120-12/15-J02 12 3

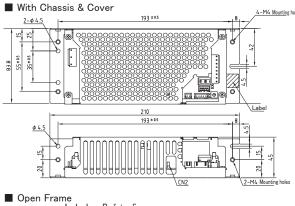
We welcome and handle your requests as many as possible by modification, etc.

1 2 3 4 5 6 7 8

Output current (A)

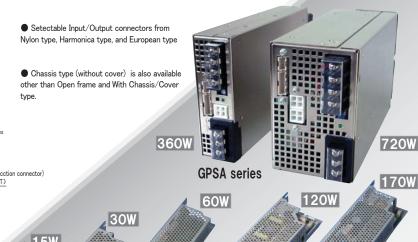
### OZP-170 series

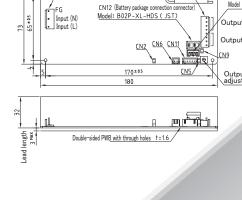


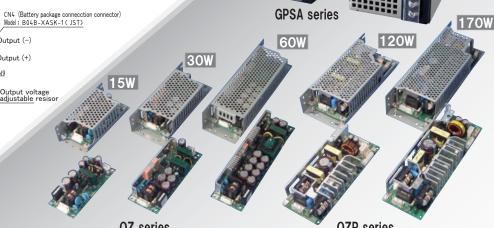


X Visit our URL below for the product specification in detail.

# http://www.nipron.co.jp/english







# General Purpose AC-DC SW' Power Supply

High efficiency/Long life/Double-sided PWBs with through holes: for Industrial use High reliability power supply

OZ/OZP/GPSA series, general purpose AC-DC SW power supply, are industrial use high reliability power supply that have achieved high efficieny and long life with Double-Sided PWBs with Through Holes. 24V output type of OZP/GPSA series can backup your system at blackout with battery package

Also, GPSA series is on its way to medical standard approval to help for you in your medical approval process to eliminate insulation transformer.

**General purpose AC-DC** single output SW PSU Product lineup

Product lineup ( ) shows peak va						
Series / Output	3.3V	5V	12V	15V	24V	
OZ(15/30/60W) series	3/6/12A	3/6/12A	1.3/2.5/5A	1/2/4A	0.7/1.3/2.5A	
OZP(120/170W) series	_	_	10(15)/14(22.5)A	8(12)/11.2(18)A	5(9)/7(12.5)A	
GPSA(360/720W) series	_	-	30(34)/56(70)A	-	15(17)/30(35)A	

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- When using our products, please contact us for product specifications and make sure to check all the items for proper use

## Mounting inside control panel

# DIN rail mounting Powe Supply Coming Soon!

DIN rail mounting brackets

Rotary type

With DIN rail bracket mounted to OZ/OZP series, DIN rail mouting is within your reach.

Two types are available, one is for OZ-015/030 (small size), and the other for OZ-060 and OZP-120/170 (Large size).

GPSA series, GNSP series, and BS14A-H24/2.5L(Battery package) can be



Series name	Bracket	Size (W × D)
OZ-015 series	Small type	164×86
OZ-030 series		
OZ-060 series	Large type	252 × 86
OZP-120 series		
OZP-170 series		





Multiple power supplies can be installed in a BOX.

European terminal for Input/Output. Optional Lifetime display monitor can be mounted. Two units of GNSP( $82 \times 235 \times 128$ ) are accepted in the BOX.



Applicable power supplies / Battery package Size  $(W \times D \times H)$ Series name OZ/OZP series 280 × 168 × 175 GPSA series BS14A-H24/2.5L GNSP series

Monting image inside Control panel

Select any power supply as you need.

GPSA-360 series Up to 2 units GPSA-750 series One unit only BS14A-H24/2.5L Up to 2 units GNSP series

Series name

One unit only Size  $(W \times D \times H)$  $252 \times 130 \times 83$ 

connected. Also, it makes easy wiring.

Applicable power supplies and Battery package Available units

> Application example; When GPSA-360-24-TP is connected to BS14A-H24/2.5L, 24V output can keep on



Brand New Product

# for 2U rack mount server, Continuous 400W ATX PSU: PC2U-530P-X2S

 Most suitable to Rack mount server, 2U size in height ATX power supply
 Min. load required is Zero amp. for every output. Any load is acceptable within the range of the specification so that you do not need to pay any attention to min. load current.

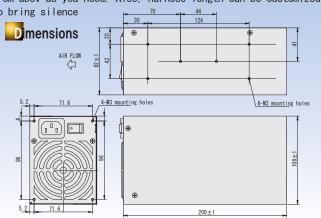
Removable Output harnesses to respond to: Main 20P, 24P, Peripheral, and S-ATA connector,

Select connectors from abov as you need. Also, harness length can be customized.

TSFC fan equipped to bring silence

Sample delivery is available in Aug. 2008!

Model	PC2U-530P-X2S							
Input voltage	85V to 264V (Worldwide range)							
Output voltate	+3.3V	+5V	+12V	-12V	+5VSB			
Max. load current/	20A	22A	22A	0.5A	2A			
	total	160W						
Max, power (Continuous)	-	total 385W						
(Conunuous)	Total 401W							
Peak load current/	30A	33A	30A	0.5A	2.5A			
Peak power	total 200W							
(5s max.)	1	total 512W						
(JS IIIdX./	Total 530.5W							
Min. load required	0A 0A 0A			0A	0A			



# Backup at blackout, Continuous 150W SFX PSU: PCFL-180P-X2S2-SF

- SFX12V power supplyt responding to SFX12V APPENDIX D size mounting face (depth is longer).
- 0.3mA or less of leakage current at AC 100V
- With battery package (BS17A-H24/2.0L) connected to PCFL-180P-X2S2-SF, backup operation at blackout becomes available. (Backup at up to 90W is available. If more power is needed, contact us.)
- 24V outupt equipped type is also lined up (however, backup operation at blackout is not available.)

Sample delivery is available in Aug. 2008!

