

Fulfilling power supply with cost performance! **GPSA series**

Price gap is only 10 to 20% for the advantage of power and ample function.



Product lineup

Series name	Output voltage		+12V	+24V
	GPSA-360 series	Rated load current		30A
Peak Load current		AC100V	40A	20.8A
		AC200V	40A	25A
GPSA-750 series	Rated load current		56A	30A
	Peak Load current	AC100V	70A	37.5A
		AC200V	80A	50A
Input voltage		AC85 to 264V		

※ +24V output model is backup available at blackout.

Your requirements can be performed as much as possible !

Introduction of customized power supply in specification

We flexibly welcome your customized specification as much as possible. Here, we would like to show some of customized specification of our AC to DC general purpose single output power supply which is introduced here, and has been adopted or under consideration. Please contact us if you are interested in it or have other specifications.

Whole-dip coating to resist neutral salt spray test

As a power supply for motor-roller conveyer

This example shows modified GPSA as a power supply for motor-roller conveyer.

Many of motor-roller conveyors are installed in factories and warehouses near the coast where **salty humidity by sea breeze** other than dust is generated. However, stable operation of power supply is required even in the environment like that.

- PCB coating (whole-dip coating)
- Protection of discrete components such as diodes against dusts by tubing

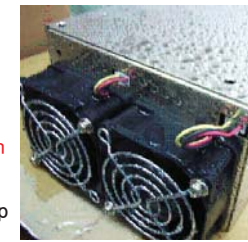
have been implemented.

Here's the solution! by whole-dip coating, as even double brushing cannot cover all area.

It has brought **continuous stable operation even under harsh neutral salt spray test!**

(Brush-coating proved poor operation to stop in several minutes.)

■ Model
GPSA-360-24-00C and GPSA-750-24-00C



Under harsh neutral salt spray test

GPSA-360 15V output model

As a power supply to drive printer motor

GPSA has been modified as a power supply to drive motor of printer.

As 15V motor is used, **GPSA-360-12 (12V output model) has been modified to 15V output.**

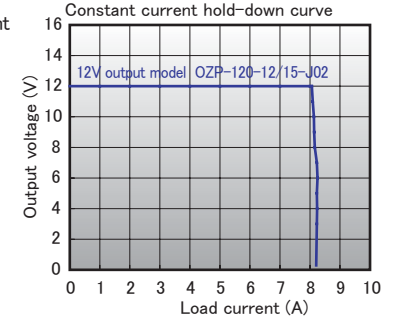
Constant current power supply

As a charger for Lead-acid battery

As a charger for **Lead-acid battery**, OZP-120-12/15 has been modified to **Constant Current power supply (hold-down)**.

(Hold-down point of constant current can be changed.)

■ Model
OZP-120/12/15-J02



Nipron GPSA-750 power supply

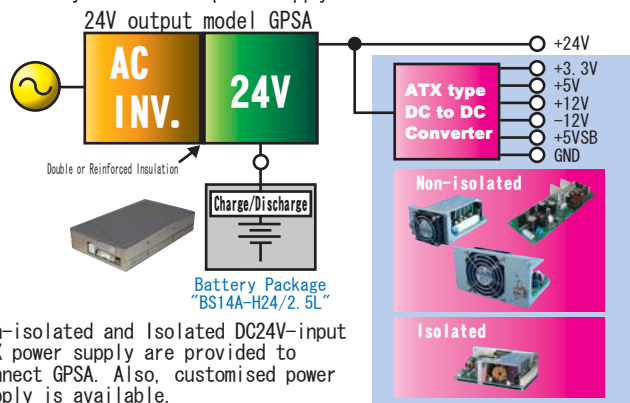
Medical power system is within your reach. ⇒	Medical standard compliant Low leakage current
Uninterruptable power system is at hand. ⇒	Backup at blackout available Blackout detection signal equipped
Additional 4W of standby power is available. ⇒	12V/0.3A standby equipped
Contributing to CO2 reduction, Energy saving, & Global environment ⇒	Higher efficiency by 3 to 5%
Removing burden for disingers to divert it to other project ⇒	Low noise (Conducted emission/Radiation)

Peak Power
1200W for 5 seconds at AC 200V
900W for 5 seconds at AC 100V
Continuous Power 720W
BASIC FUNCTION

Competitor's 600W power supply
Peak Power
837W for 10 seconds at AC 200V
Continuous Power 648W
BASIC FUNCTION

As medical-standard power system

- No isolation transformer required in front
- Backup at blackout is available
- Flexible medical power system is here for you simply changing the secondary unit of GPSA power supply



Non-isolated and Isolated DC24V-input ATX power supply are provided to connect GPSA. Also, customised power supply is available.

Blackout detection signal equipped/Backup at blackout available

Blackout detection signal is equipped to all GPSA series to save customer's cost for building detection block. In addition, 24V output model carries out backup at blackout by connecting to battery package and **shuts down automatically by NSP Pro 2.** (Harness is optional.)



12V Standby equipped

+12VSB provides 0.3A to serve as auxiliary power supply with actual load of approx. 0.5A.

For example, in practice, +12VSB is used as interface power supply with LAN or USB while 24V output drives motors in financial terminals. Also, it can be used as standby power supply to turn on or off remotely.

Standby power supply
+12VSB (Auxiliary power)
0.3A

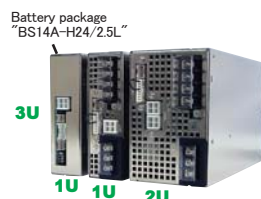
※1 Approx. 0.5A is actually available.
※2 0.1A max at backup operation.

High Peak Power

Peak power gives more than 120% of rated power for 5 seconds, and more at AC 200V input.

Convenient size for rack mounting

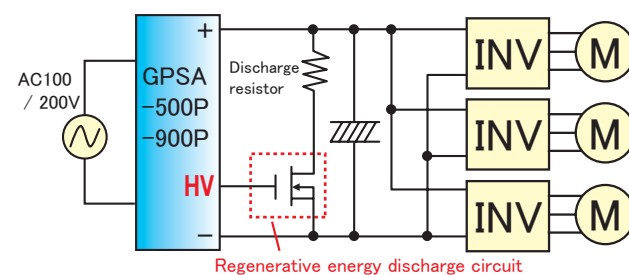
Designed to mount in 19 inch rack
1U (width), 3U (height) for GPSA-360/500P
2U (width), 3U (height) for GPSA-750/900P
In addition, 1U (width), 3U (height) for battery package
They are all mountable into 1U, 2U, and 3U rack.



Dimension (W×H×D)
GPSA-360/500P: 41 × 128 × 230 mm
GPSA-750/600P: 82 × 128 × 235 mm
BS14A-H24/2.5L: 41 × 128 × 211 mm

New +24 to +48V output models are lined up for motor drive in GPSA series.

New models are here in GPSA series! +24V, +30/36V, and +42/48V output models equipped with regenerative voltage detection signal (HV) lined up. To be launched in June, 2009. Regenerative energy discharge circuit is easily built by HV signal for the system in which multiple DC inverters (Servo) are used.



Product lineup

Series name	Output voltage	Output voltage					
		+24V	+30V	+36V	+42V	+48V	
GPSA-500P series	Rated load current		15A	12A	10A	8.5A	7.5A
	Peak Load current	AC100V	20.8A	16.6A	13.8A	11.9A	10.4A
		AC200V	25A	20A	16.6A	14.2A	12.5A
GPSA-900P series	Rated load current		30A	24A	20A	17A	15A
	Peak Load current	AC100V	37.5A	30A	25A	21.4A	18.7A
		AC200V	50A	40A	33.3A	28.5A	25A
Input voltage		AC85 to 264V					

※ +30V and +36V are output voltage adjustable. ※ +42V and +48V are output voltage adjustable.
※ +24V output model is backup available at blackout.

Removal of earthing capacitors

As a power supply for gate-drive of full-bridge inverter circuit

This example shows the modification of OZ-030 as power supply for gate-drive of full-bridge inverter circuit

As insulation between high side and low side of full-bridge is required **even at high frequency, earthing capacitors between primary and secondary has been removed.**

(This specification does not cover safety standard.)

■ Model
OZ-030-5-J01 and OZ-030-15-J01

Brand New Model

Medical ATX power supply "m Series"

IEC60601-1 acquisition in April to May, 2009



Specification summary [] shows mPCSA-500P-X2S

Input voltage	AC85V to 264V (worldwide)				
	+3.3V	+5V	+12V	-12V	+5VSB
Output voltage	20A	22A	22A	0.5A	2A
Max current/Max power (continuous)	total 285W				
	Total 301W				
Peak current/Peak power (5 seconds max)	30A	33A	30A	0.5A	2.5A
	total 432W [482W]				
Total 450.5W [500.5W]					
Min. load current	0A	0A	0A	0A	0A
Dimensions (mm)	W(150) × D(140) × H(86)				

Application

IT devices to support advanced medical treatment including image processing
Medical standard is now required for PCs that are used at medical treatment scene.

Features

- Backup at blackout is available (mNSP3-450P-S20-H1V)
- RoHS Directive compliant
- Min. required load current is 0A for all outputs.
- To respond to any load within the specification without worry about min. required load current.
- Safety standard UL/CSA: IEC60601-1, UL/CSA: IEC60950
- Conducted emission Class B
- Low leakage current specification ⇒ 0.5mA max. at nominal input voltage

Actual data of leakage current) Load: Rated load

Nominal input voltage	mNSP3-450P-S20-H1V	mPCSA-500P-X2S
AC 100V	0.15 mA typical	0.15 mA typical
AC 200V	0.29 mA typical	0.29 mA typical

Applications

