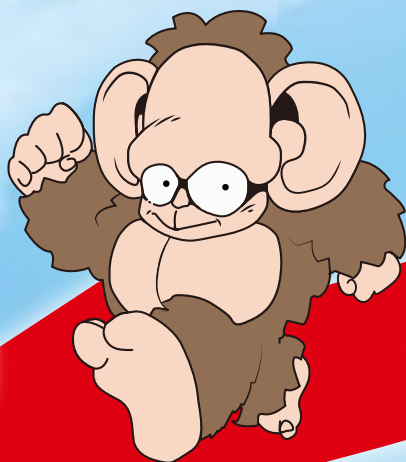


1970

# Nipron Wave

## Vol.61

50<sup>th</sup>  
ANNIVERSARY  
2020



**50 YEARS OF  
MARATHON  
TO THE FUTURE**

**This is the highlight**

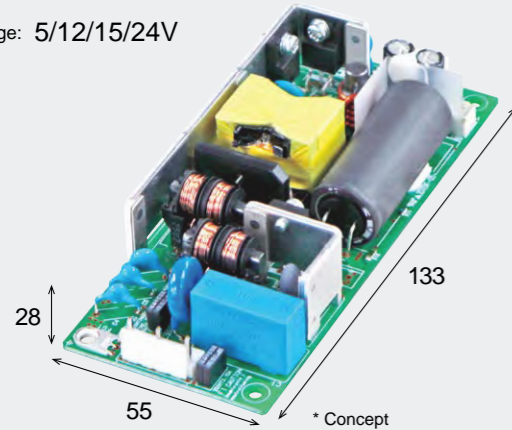
- 1 "Products of the 50th anniversary"  
New products lineup that celebrates the 50th anniversary
- 2 Renewable energy for BCP measures
  - Announcing the "Zero Energy Room," which enables in-house power consumption with one room!
  - Introduce the solar carport which completed in head office

# NEW mFZP-075 Series

Medical standard IEC60601-1 Ed.3.1 approved  
Small PCB type single output power supply

Continuous: 75W Peak: 150W

Output voltage: 5/12/15/24V



## Specifications

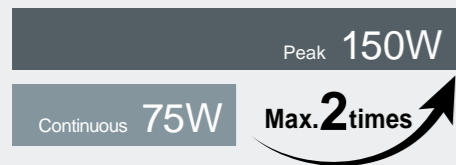
mFZP-075-	5	12	15	24
Output voltage	+5V	+12V	+15V	+24V
Continuous current	10A	6.25A	5A	3.13A
Continuous power	50W	75W	75W	75W
Peak current (within 5 s)	15A	12.5A	10A	6.25A
Peak power (within 5 s)	75W	150W	150W	150W
Efficiency	100VAC	80%typ	84%typ	85%typ
	200VAC	82%typ	86%typ	88%typ
Input voltage	85-264V AC (worldwide range)			
Safety standards	IEC/EN60601-1 (Ed.3.1, MOPP, MOOP), IEC/EN62368-1 (2nd) (CE marking), UL ANSI/AAMI ES60601-1 (Ed.3.1), UL/cUL62368-1 (Ed.2), CCC:GB4943.1 expected to be approved			

Small, large capacity and high peak power achieved

Support twice the peak load (except 5V type)

Peak power is available for 5s. Optimum for equipment that requires inrush current such as motors.

■mFZP-075-12, 15, 24

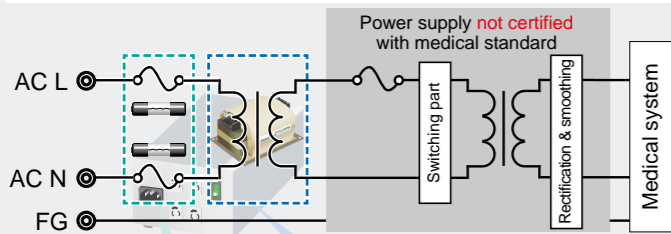


## Other features

- Medical standard IEC60601-1 (MOPP, MOOP) is expected to be approved.
- The power supply unit clears VCCI ClassB for the conducted emission.
- With chassis or with chassis and cover type lineup
- A variable resistor for adjusting output voltage provided (adjustable range: ± 10%)
- Possible to backup for instantaneous power failure (optional)

## Benefits of using certified power supplies in medical equipment

### A power supply is **not** certified with medical standard

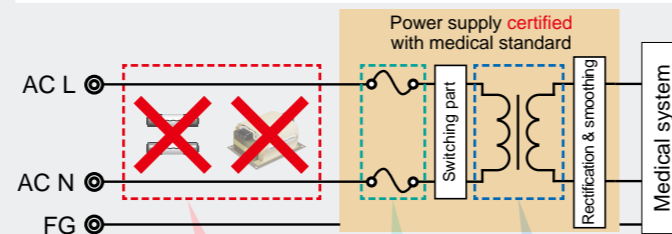


A safety standard certified fuse or a breaker is required for both L and N lines.  
An isolation transformer compliant to IEC60601-1 is required as a countermeasure against leakage current, creepage distance and withstand voltage.

It is necessary to provide separately a fuse, a transformer, etc.  
A fuse and a transformer shall be installed separately from a power supply unit.

The system becomes enlarged and more expensive.

### A power supply is **certified** with medical standard



It is not necessary to provide a fuse or a breaker, and a medical isolation transformer.  
Both L and N lines contain fuses.  
Withstand voltage and creepage distance like those of a transformer for medical use

It is not necessary to provide separately a fuse, a transformer, etc.\*1

The system becomes miniaturized and less expensive.

\*1 Please consult us if you need high interrupting rating fuse.

\* Since the product is under development, the specifications and appearance shown here may change without notice.

Ultra small! Medical standard certified single output power supply

<http://www.nipron.com>

# NEW HN5P5-350P Series

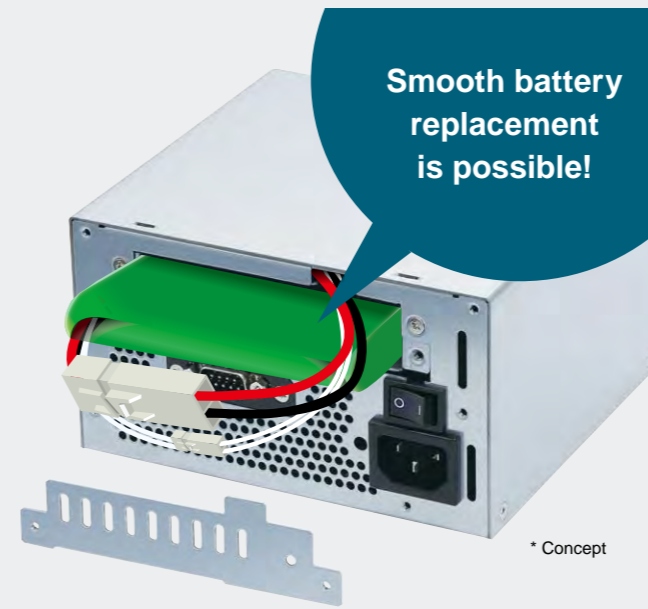
No external battery required, space-saving Nonstop power supply  
ATX power supply with a built-in lithium-ion battery

Continuous: 245W Peak: 341W



## Built-in battery package in a housing

A blackout backup system without an interruption can be realized because of the built-in battery package in the housing. It is possible to replace the battery from the mounting surface, so not necessary to disassemble or remove the power supply from the PC.



## Other features

- Support lithium-ion batteries
- The power supply unit clears VCCI ClassB for the conducted emission
- Low sound noise by adopting a temperature controlled variable speed fan.
- Minimum load current 0A for all outputs
- Shutdown control signal from RS232C/USB

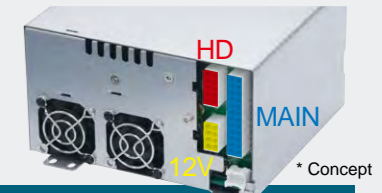
## Specifications

Output voltage	+3.3V	+5V	+12V	-12V	+5VSB
Max. current/ max. power (continuous)	12A	12A	20A	0.5A	1A
	Total 66.4W		240W	6W	5W
Peak current/ peak power (within 5 s)	Total 240W		Total 245W		
	16A	16A	28A	0.5A	1A
Max. current/ max. power (at backup operation)	Total 83W		336W	6W	5W
	Total 200W		Total 341W		
Max. current/ max. power (at backup operation)	12A	12A	16A	0.5A	1A
	Total 83W		192W	6W	5W
Total 205W		Total 205W			

## Harness

Numbers of harnesses

MAIN 1 model, 12V 1 model, HD 1 model



Model	Length and type of connector
<b>Main harness</b> MAIN	
WH-M2022-500	500±10 MAIN 20Pin
WH-M2422-500	500±15 MAIN 24Pin
<b>12V harness</b> 12V	
WH-V0808-500	500±15 12V 8Pin
WH-V0408-500	500±15 12V 4Pin
WH-VG208-500	500±15 12V 4Pin PCI-E 6Pin
WH-VV208-500-02	500±10 12V 8Pin 12V 8Pin
WH-VG208-500-02	500±10 12V 8Pin PCI-E 6Pin
<b>HD harness</b> HD	
WH-PP610-850	550±15 150±15 150±15
WH-PS610-850	550±15 150±15 150±15
WH-PS710-850	550±15 150±15 150±15 850±15
WH-PS810-1000	550±15 150±15 150±15 150±15

\* Since the product is under development, the specifications and appearance shown here may change without notice.

Never-before-seen ATX power supply with a built-in lithium-ion battery

<http://www.nipron.com>

# UDP Series

The thin and high efficiency module design enables miniaturization of control panels to save space  
DIN-rail power supply



## UDP-240 Series

Continuous: **240W** Peak: **400.8W**  
Output voltage: **24V** Max. efficiency: **94%**

## UDP-180 Series

Continuous: **180W** Peak (100/200VAC): **201.6/300W**  
Output voltage: **24V** Max. efficiency: **93%**

## UDP-120 Series

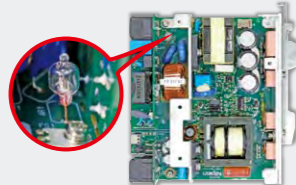
Continuous: **120W** Peak (100/200VAC): **201.6/300W**  
Output voltage: **24V** Max. efficiency: **92%**

## High efficiency, long life design

Software switching is adopted in the UDP series. Compared to conventional hardware switching, it suppresses heat generation due to the switching loss significantly, enabling miniaturization of built-in components. This makes it possible to produce smaller and more efficient power supply units.

## The built-in arrestor enhances the resistance against lightning surges

By incorporating an arrestor as a surge protector, the resistance to external surges due to lightning or other causes has been enhanced.



Common mode:  
actual performance  $\pm 8kV$

## Clears VCCI ClassB for the conducted emission

The power supply unit clears VCCI ClassB for the conducted emission. Because there is no need to install an external noise filter, it facilitates reductions in the cost and man-hour.

## Specifications

Model	UDP-240-A24	UDP-180-A24	UDP-120-A24
Output voltage	+24V	+24V	+24V
Continuous power	240W	180W	120W
Peak power (10s) 100/200VAC	400.8W	201.6W/300W	201.6W/300W
Efficiency	115VAC	92%typ	91.5%typ
	230VAC	94%typ	93%typ
Power factor	115VAC	99%typ	99%typ
	230VAC	91%typ	89%typ
Input voltage	85-264VAC (with PFC, worldwide range)		
Input voltage*	UL (cUL)62368-1, UL508, CE marking approved PSE (ordinance item2) compliant		

\* UDP-180 and UDP-120 are compliant.

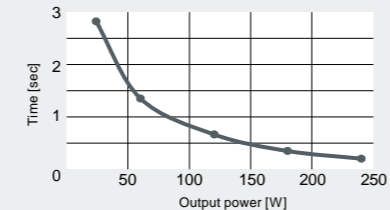
## Backup for instantaneous power failure

By connecting a capacitor unit, backup for instantaneous power failure has been realized. Expected service life of 15 years has been realized in an environment of average ambient temperature of 40°C, eliminating the need for regular replacement of the unit.

### DS01A-EC400/172F



### Backup discharge characteristics (UDP-240-A24-B0 at 100 VAC)



Possible to extend the backup time by parallel connection of the units



### Blacked out backup model is under development

DS02A-L24/2.5L Lithium-ion battery unit

## Other features

- Wide operating temperature range from -20°C to 70°C (derating required)  
Even if the temperature inside the control panel is high, mechanism design with high degrees of freedom is possible.
- Available to start up at -40 deg environment
- The PCB is coated as standard specification
- Equipped with a variable resistor for adjusting output voltage
- Notification of service life expiration supported (optional)  
Notify the deterioration of electrolytic capacitor by H/L signal and LED.
- Possible to support SEMI F47
- EN62477-1 OVC compliant design

# “ATX12VO” standard compliant power supply under development

## Lineup of the products to be released

### HPCSA-1500P

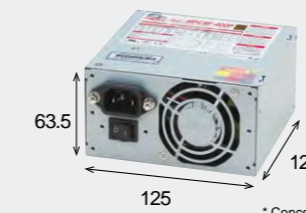
Continuous: 1200W Max. efficiency: 94%  
Peak: 1500W (measurement at 230V)



CH	CH1-7	CH8
Output voltage	+12V	+12VSB
	24A	1A
Continuous max. current/power	Total 1200W	12W
	Total 1200W	
Peak current/power (within 5s)	32A	2A
	Total 1500W	
Min. current	0	0

### HPCSF-400P

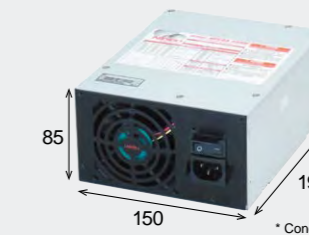
Continuous: 310W Max. efficiency: 89.1%  
Peak: 400W (measurement at 240V)



CH	CH1-2	CH3
Output voltage	+12V	+5VSB
	25A	2A
Continuous max. current/power	Total 300W	10W
	Total 310W	
Peak current/power (within 5s)	30A	3A
	Total 385W	
Min. current	0	0

### HPCSA-1000P

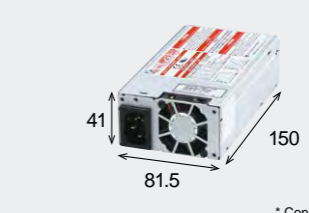
Continuous: 822W Max. efficiency: 89.5%  
Peak: 1000W (measurement at 240V)



CH	CH1-4	CH5
Output voltage	+12V	+5VSB
	18A	3A
Continuous max. current/power	Total 792W	15W
	Total 822W	
Peak current/power (within 5s)	25A	4A
	Total 1000W	
Min. current	0	0

### HPCFX-350P

Continuous: 245W Max. efficiency: 88.4%  
Peak: 346W (measurement at 240V)



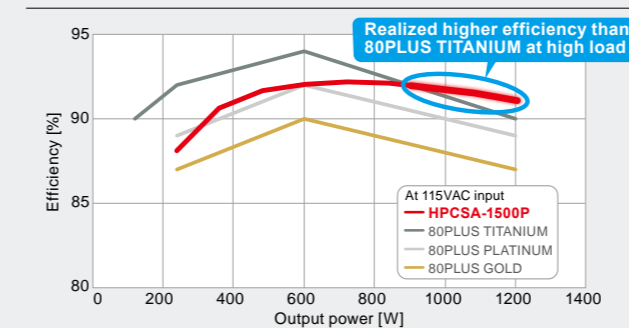
CH	CH1-2	CH3
Output voltage	+12V	+5VSB
	20A	1A
Continuous max. current/power	Total 240W	5W
	Total 245W	
Peak current/power (within 5s)	28A	2A
	Total 336W	
Min. current	0	0

## Features

### High efficiency & high reliability

High efficiency and high reliability are achieved simultaneously by designing optimal components layout and conducting severe product evaluation test.

### Efficiency graph (HPCSA-1500P an example of measurement)



### Low noise

With the enhancement of noise filter circuits and optimization of component arrangement, the conducted emission for the power supply unit alone clears VCCI Class B. Elimination of an external noise filter makes it possible to reduce the cost and man-hour.

### Conducted emission characteristics (HPCFX-350P an example of measurement)



### Low sound noise design by adopting a temperature controlled variable speed fan.

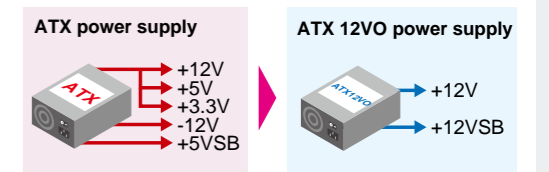
### Reliable long term stable supply

### Standby output is selectable from 5 V or 12 V

### Available as a 12V single output power supply

## What is ATX12VO?

ATX12VO stands for ATX 12V Only. It is a new power supply standard that output voltage is only +12V and SB power supply. Conventional ATX power supplies output multiple voltages such as +3.3V +5V, +12V, -12V, and +5VSB. It causes complex system because of cable arrangement and so on. In 2019, Intel released this standard to simplify the system by making the power supplies simpler. Devices require +3,3V, +5V, or -12V are powered by DC/DC converters embedded on motherboards.



\* Since the product is under development, the specifications and appearance shown here may change without notice.

Thin, low-heat-generation design results in a space-saving control panel <http://www.nipron.com>

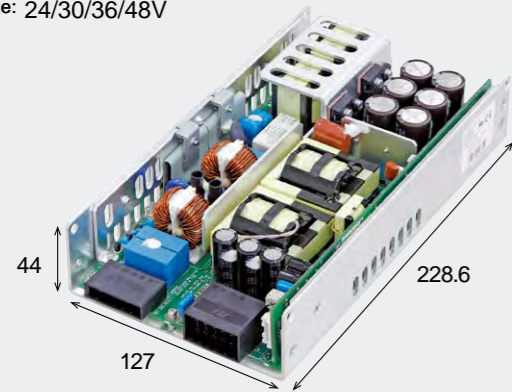
Higher efficiency will be achieved by the new design guide. <http://www.nipron.com>

# UZP-600 Series

Fanless power supply unit supporting the peak power output of 1200 W

Continuous: **600W** Peak: **1200W**

Output voltage: 24/30/36/48V

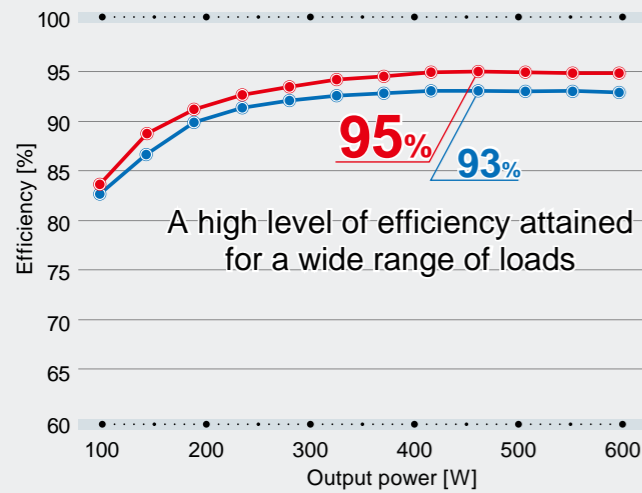


## One of the best in the industry in terms of efficiency

A high level of efficiency 95%typ has been achieved for a 24 V output type, providing a significant support for saving energy and reducing CO<sub>2</sub> emission.

### Efficiency graph (an example of measurement)

[Measurement condition: — 100VAC input — 230VAC input]



## The high peak power twice as high as the continuous power is supported

The unit can supply the power twice as large as the continuous power for the predefined time (5s). This eliminates the need to select a power supply unit with a large continuous power rating matching the peak load and enables the reduction in the PSU size, leading to many benefits including the elimination of fans in the unit and replacement of unit-type power supplies.

Peak **1200W**

Continuous **600W**

Twice the power

Highly efficient design reduces heat generation and increases equipment reliability.

<http://www.nipron.com>

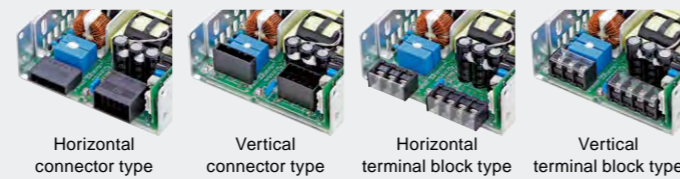
## Specifications

Model	UZP-600-A24	UZP-600-A30	UZP-600-A36	UZP-600-A48	Common output	
Output voltage	+24V	+30V	+36V	+48V	+12VSB	+12V FAN (optional)
Continuous current/continuous power (natural air cooling)	25A 600W	20A 600W	16.7A 601.2W	12.5A 600W	0.42A 5W	0.25A 3W
Continuous current/continuous power (forced air cooling)	33.4A 801.6W	26.7A 801W	22.3A 802.8W	16.7A 801.6W	- -	- -
Peak current/peak power (within 5s)	50A 1200W	40A 1200W	33.4A 1202.4W	25A 1200W	- -	- -
Input voltage	85-264VAC (with PFC, worldwide range)					
Safety standard	UL (cUL) 62368-1, CE marking approved PSE (ordinance item2) compliant*					

\* 30V and 36V types are compliant with safety standard.

## I/O terminal blocks for different scenes of use are available

The PSU comes with harmonica style terminal blocks or dividable nylon connectors as I/O terminals.



Adopt dividable nylon connectors



## Features

- Miniature size of 5 × 9 inches
- Comes with a +12 V standby output
- Blackout detection signal and remote ON/OFF feature incorporated
- Instantaneous power failures can be addressed by connecting a capacitor unit
- The built-in arrester to avoid/mitigate the risk of lightning damage  
Common mode: actual performance ± 8kV
- Models certified for medical standards will also be added
- Notification of service life expiration supported (optional)  
Notify the deterioration of electrolytic capacitor by H/L signal and LED.
- With a +12V output (optional) linked with the remote ON/OFF for the fan
- Instantaneous power failures can be addressed by connecting a capacitor unit and pack



Capacitor unit <sup>\*1</sup>  
CB03A-EC400/801F  
<sup>\*1</sup> scheduled to apply for safety standards



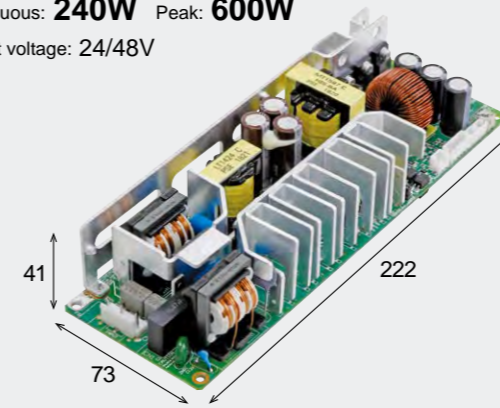
Capacitor pack <sup>\*2</sup>  
BS13A-EC400/422F  
<sup>\*2</sup> compliant to safety standard

# OZP-240/600P Series

The power supply featuring enhanced peak power

Continuous: **240W** Peak: **600W**

Output voltage: 24/48V



## Features

- Amazing support for the high peak load approx. 2.5 times larger
- The power supply unit clears VCCI ClassB for the conducted emission
- With remote ON/OFF feature
- With blackouts detection signal

# GP1U-1000 Series

Low height 1U size PSU

Continuous: **1008W** Peak: **1440W**

Output voltage: 24/48V



## Features

- A long service life and high power density offered in one unit
- 100% output with ambient temperature of 50°C available
- 100% output at 90VAC input available



Amazing number of rollers are driven with its high peak output despite its small size

## Specifications

Model	OZP-240/600P-24	OZP-240/600P-48
Output voltage	+24V	+48V
Max. current/ max. power (continuous) 200VAC	10A 240W	5A 240W
Peak current/ peak power (within 5s) 200VAC	25A 600W	12.5A 600W
Max. current/ max. power (continuous) 100VAC	8.4A 201.6W	4.2A 201.6W
Peak current/ peak power (within 5s) 100VAC	16.7A 400.8W	8.4A 403.2W
Input voltage	85-264VAC (with PFC, worldwide range)	
Safety standard	UL (cUL) 60950-1, IEC62368-1, CE marking approved PSE (ordinance item2) compliant	

## ■ Double sided through hole printed circuit board adopted

## ■ A variable resistor for adjusting output voltage provided

## ■ Instantaneous power failures can be addressed by connecting a capacitor unit or pack.



Capacitor unit <sup>\*1</sup>  
CB03A-EC400/801F

<sup>\*1</sup> scheduled to apply for safety standards



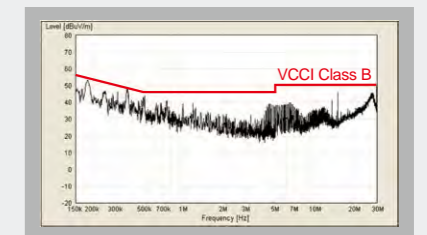
Capacitor pack <sup>\*2</sup>  
BS13A-EC400/422F

<sup>\*2</sup> compliant to safety standard

## Specifications

Model	GP1U-1000-24P	GP1U-1000-48P	Common output
Output voltage	+24V	+48V	+12VSB
Max. current/ max. power (continuous)	42A 1008W	21A 1008W	0.5A 6W
Peak current/ peak power (within 5s)	60A 1440W	30A 1440W	0.5A 6W
Min. current	0A	0A	0A
Input voltage	85-264VAC (with PFC, worldwide range)		

## ■ The power supply unit clears VCCI ClassB for the conducted emission



## ■ Low leakage current

Low leakage current characteristics of 0.5mA or less at 264VAC input have the same level as a power supply listed as certified according to the medical standard

## ■ Supports parallel operation

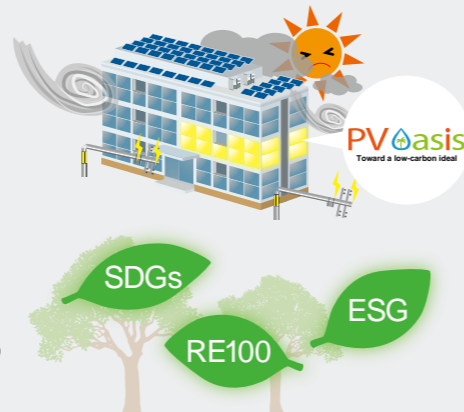
With a built-in current balance circuit, supports parallel operation of up to three units

## ■ Models certified for medical standards will also be added

Medical standard IEC60601-1 Ed.3.1(MOPP) certified model will be added.

\* Since the product is under development, the specifications and appearance shown here may change without notice.

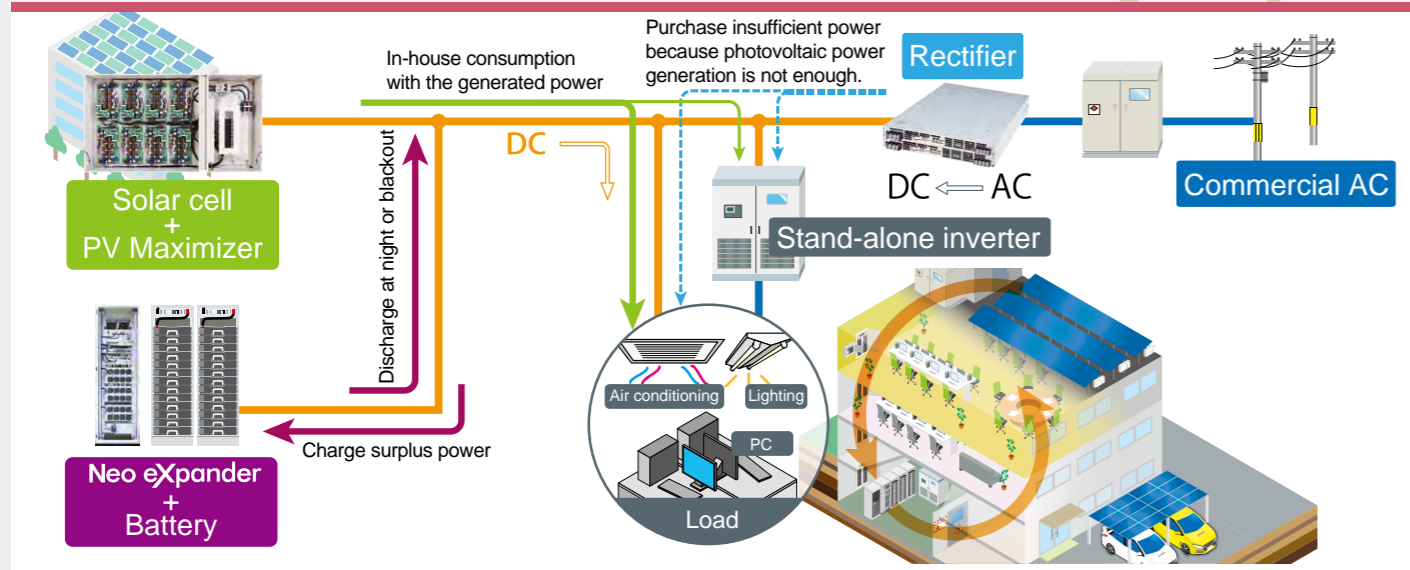
<http://www.nipron.com>



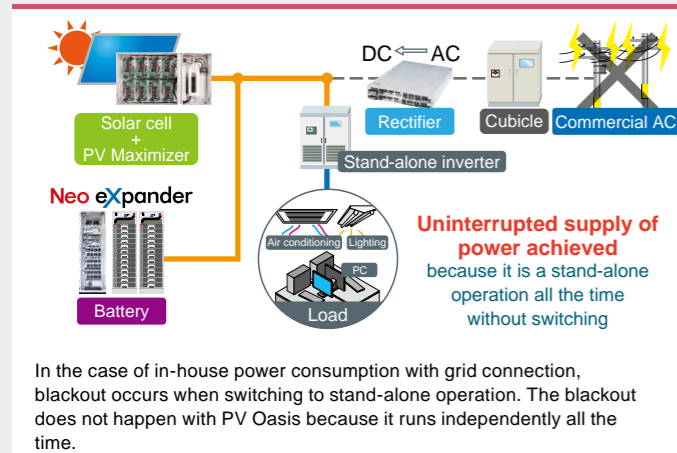
## Simultaneously supports your business continuity plan as well as your sustainability initiatives.

Since the PV Oasis system is not connected to the grid, coordination for the grid connection is not necessary and it is possible to introduce an in-house power consumption system smoothly. The PV Oasis power storage system may be used as an emergency power source in an event of a blackout (BCP measures).

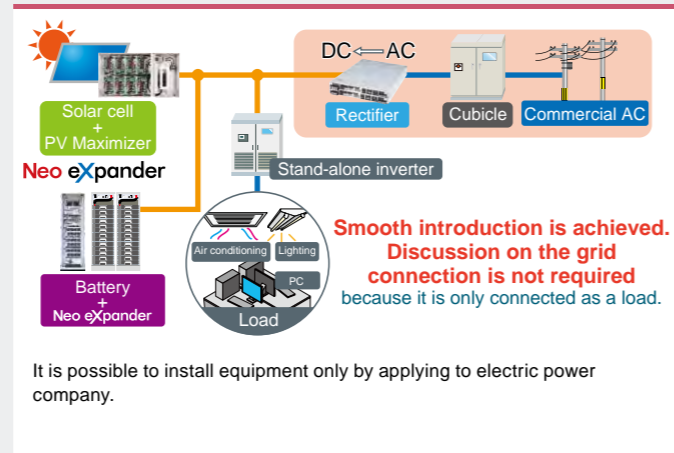
Also, the use of a clean energy source that does not emit CO<sub>2</sub> in power generation makes it possible to utilize decarbonization as an eco-friendly value and enhance the corporate value.



## Uninterrupted supply of power



## Negotiation for the grid connection not required



## Other fascinating advantages

### Parallel operation with a standby power generator

As the standby power generator and the solar power can be used parallelly, rather than switching, a stable operation is possible for a prolonged period while securing the required power and reducing the fuel consumption.

### Power consumption peak cut

When peak demand is suppressed, the maximum demand is lowered. The basic rate will be lowered, and the electricity charge will be reduced.

### Additions and expansions are easy

### Off-the-grid systems

### Parallel supply of AC and DC power is possible

**There are more advantages comparing with common in-house consumption.**

Photovoltaic power generation monitoring for



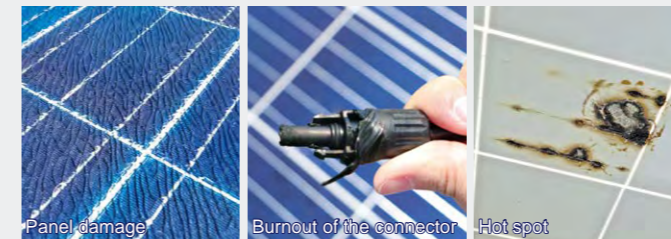
Battery monitoring and control

for Neo eXpander

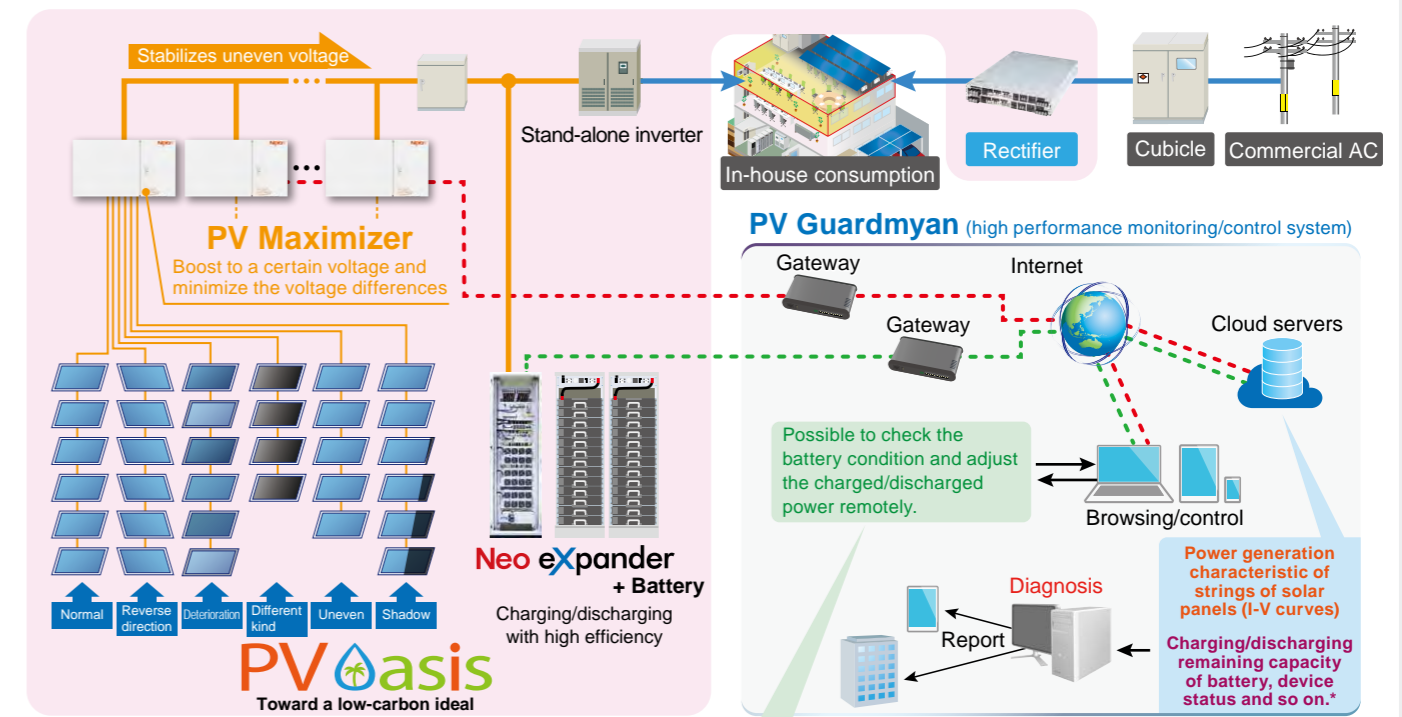
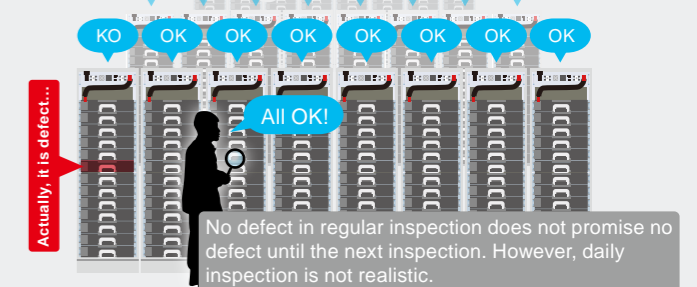
## Reduce O&M cost by remote monitoring and automatic error diagnosis. Recommend using with PV Oasis!

PV Guardmyan manages and analyzes big data, including the power generation for each string measured by the PV Maximizer and characteristics curve (I-V characteristics curve) reflecting the health of each string, detects problems and their signs remotely and reports them. It offers cloud-based monitoring/diagnosis of the power storage systems and remote control of charging/discharging operation. It enables operation for BCP measures and reduction of maintenance cost.

### A small anomaly may lead to a big trouble

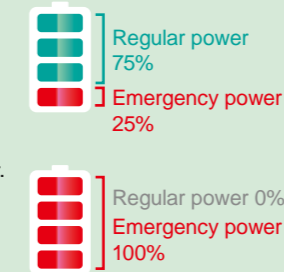


### Neglecting of the maintenance could result in it not working when it is needed to.



## It is possible to assign the emergency battery power with a remote control.

Combined operation of PV Guardmyan and Neo eXpander (PV Oasis) can be emergency battery system. It will be BCP measures. It monitors the batteries at the same time, so daily maintenance can be minimized. It can be great labor saving comparing with an independent power generator.



Minimize the emergency power if the weather was stable.

Set aside all the power for emergencies because a typhoon is approaching.



With the PV Guardmyan, it is possible to assign the emergency battery power arbitrarily with a remote control.

\* To be supported

# Implement in-house power consumption starting with a single Zero Energy Room.

## Have you experienced these things?

Main client is checking the progress of environmental action.

No action may impact the business.

SDGs

Decarbo-  
nization

RE100

However, big budget is not available for ZEB (Zero Energy Building) amid COVID-19.

Take it easy and start from little things

Achieve Zero energy consumption starting with one room in your existing office (no cubicle modifications required).

Nipron's  
Zero  
Energy  
Room

## Have you experienced these things?

Feeling nervous by hearing experiences in the wide area blackout in Hokkaido and Chiba.

Tomorrow, it could happen to us. At least, the safety of employees should be ensured.

However, we do not have a fund sufficient to build a new shelter and, even if we did, it would be a waste not to use it on a regular basis.

Blackout

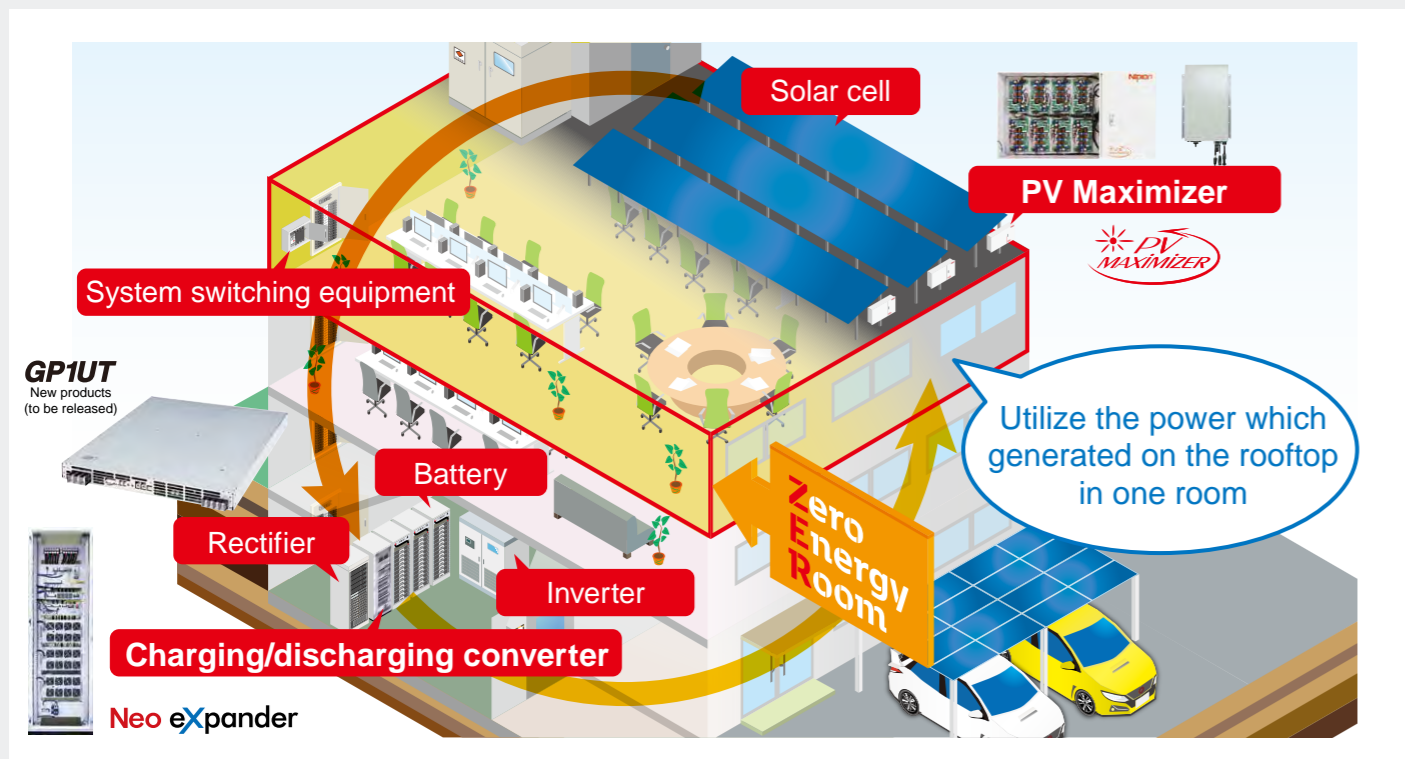
BCP

Resili-  
ence

Take advantage of existing equipment first

One room of an existing office can be modified to a shelter. (It can be used for a long time because of the renewable energy.)

Nipron's  
Zero  
Energy  
Room



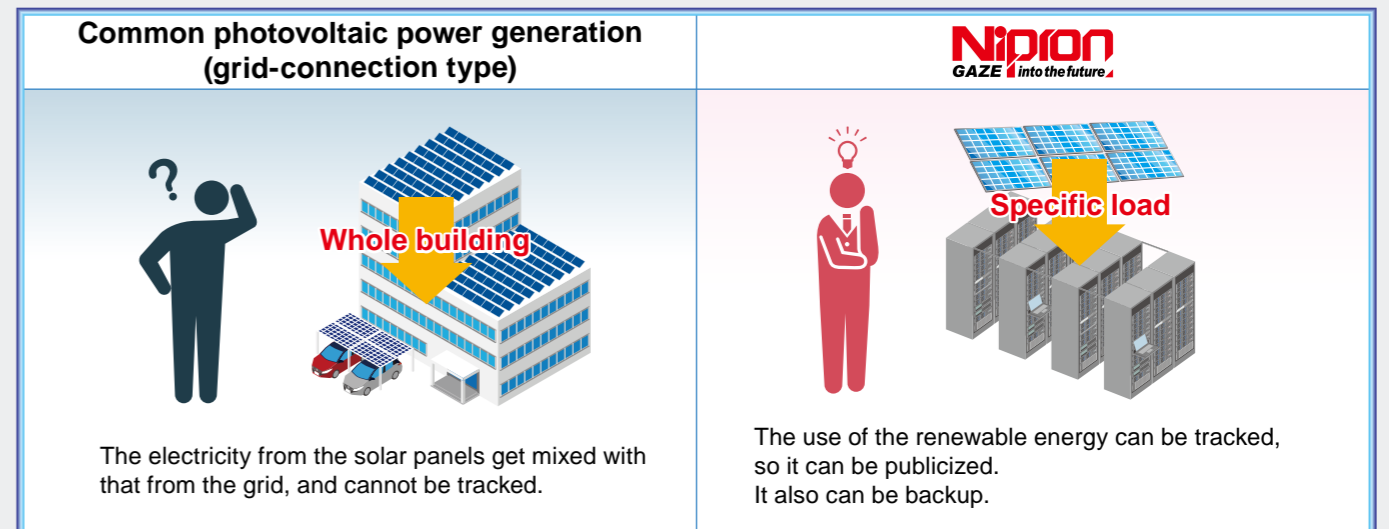
Zero Energy Room starting with one room

<http://www.nipron.com>

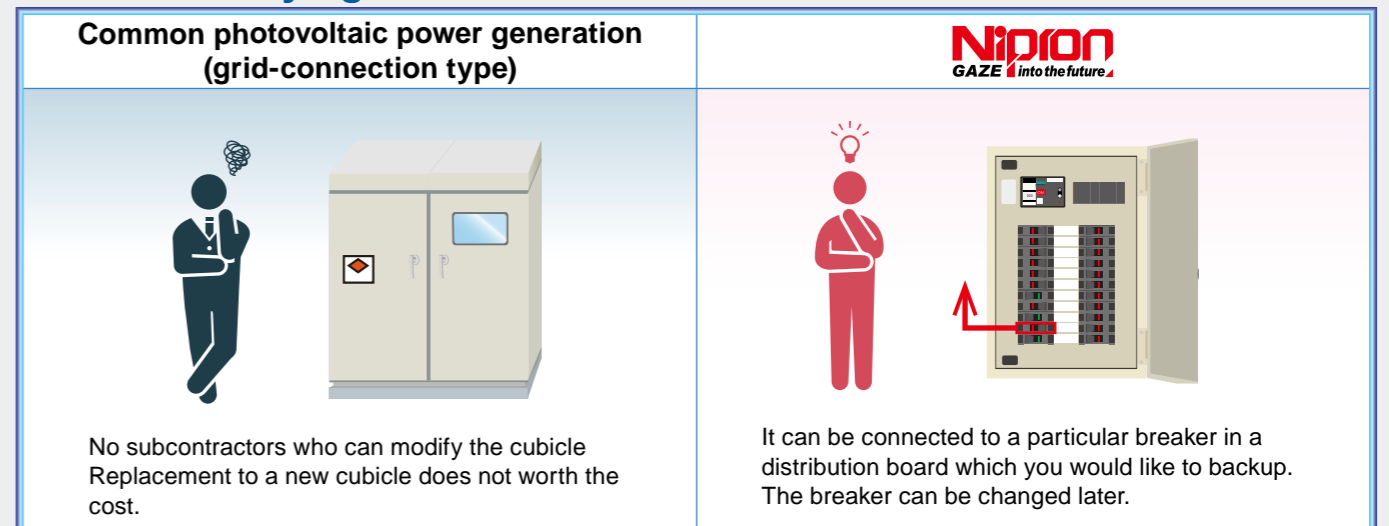
**PVasis** available from one room  
Toward a low-carbon ideal

## Special point of Zero Energy Room

The use of renewable energy (photovoltaic power generation) can be tracked.

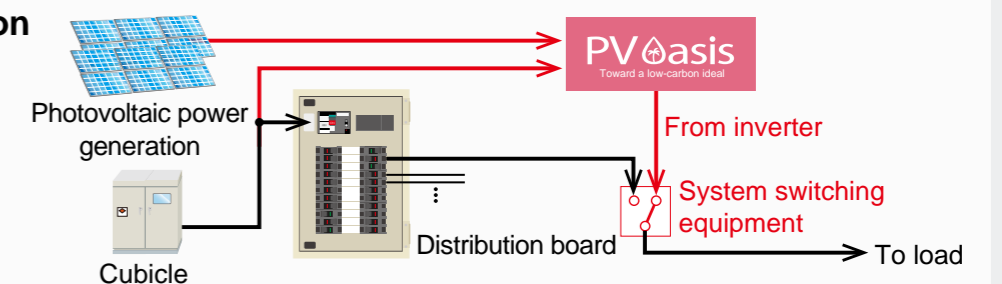


## Connect circuit breaker of distribution board without modifying cubicle



## Concept of connection

Additional equipment (red) is connected to the existing cables (black).



Nipron offers unique eco-solutions.

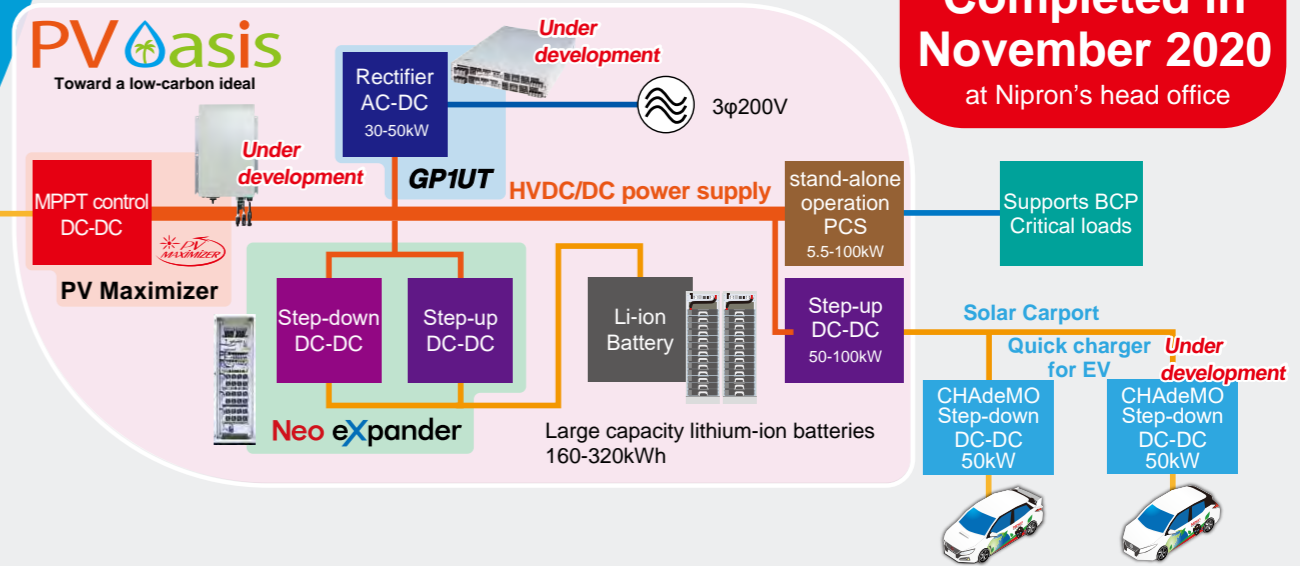
<http://www.nipron.com>

# Charge EV/ power storage system by photovoltaic power generation "Solar Carport"

## Backup by EV/ power storage system at blackout



Compatible utilizing renewable energy and BCP measures



The new products to be released

### Rectifier [GP1UT-6000-400-TIS] Optimal rectifier for DC power supply system configuration

AC from grid can be converted to stable and highly efficient DC.  
Rack-mount model which can customize output power by parallel operation of the power supplies.



Input voltage range: **Three phase 180-264VAC**

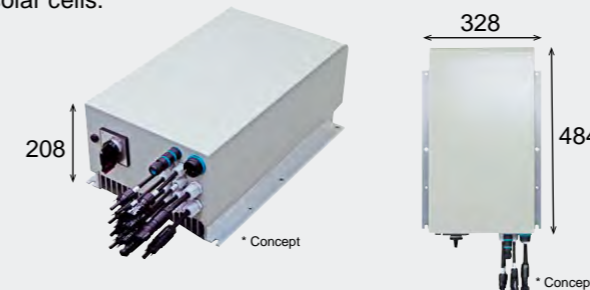
Rated output voltage: **400V**

Rated output capacity: **6600W**

- Support three phase harmonic current regulation
- Output voltage adjustable by external voltage regulation (240V-400V)
- Support CVCC regulation and available as a charger
- Safety standards: IEC62368-1 compliant

### New model PV Maximizer Supports 4 strings with 1 unit

Controlling the voltage to maximize output of solar cells, and converting it to stable and high efficient DC for DC power supply system.  
Additionally, it is possible to detect risk of failure through dedicated cloud servers by collecting and analyzing measured data of the solar cells.



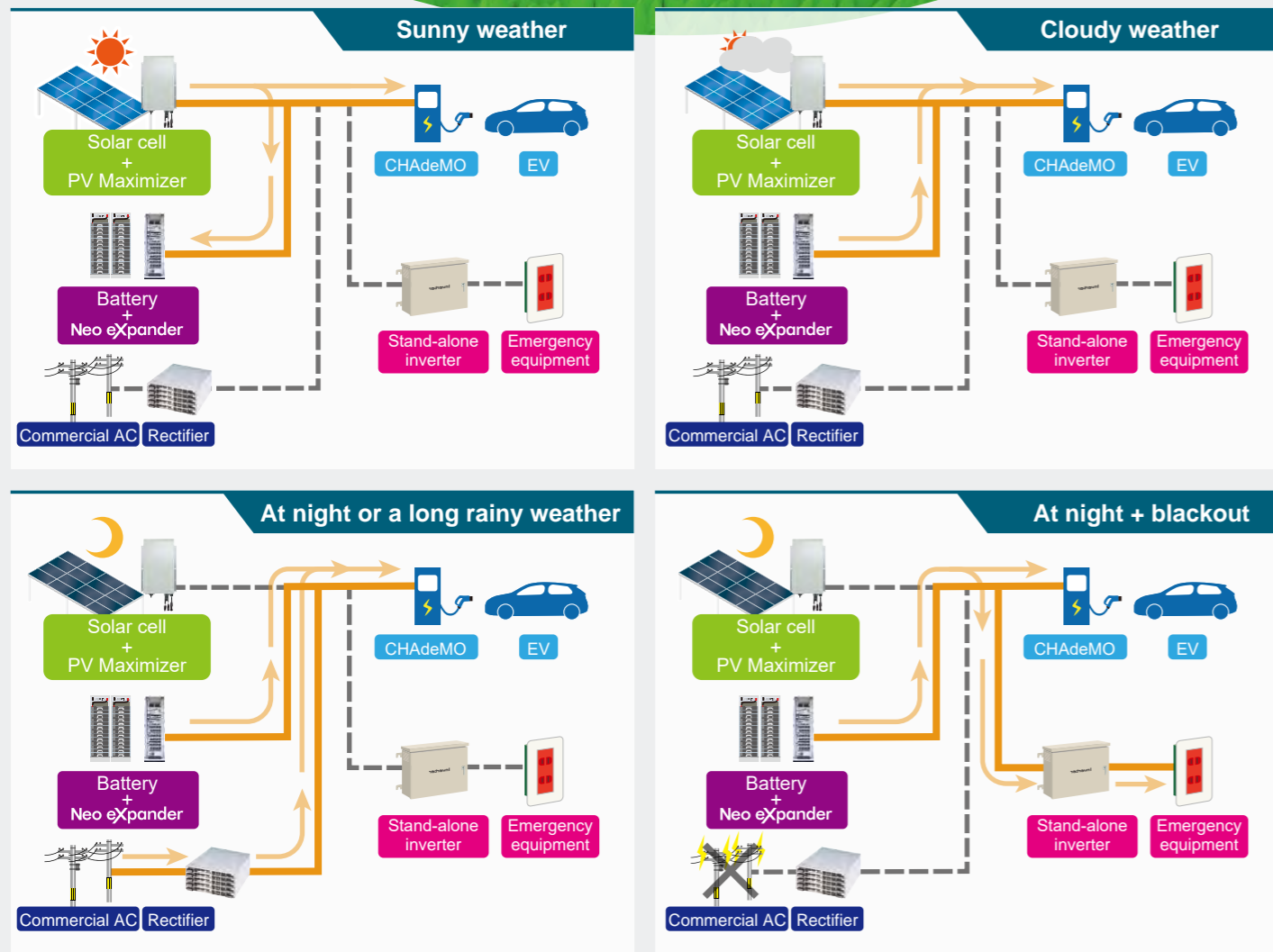
Input voltage range each string: **160-400V**

Input current/ power each string: **10A/3.2kW**

Output voltage configurable range: **200-400V**

- Support 4 strings input with 1 unit
- Optimal power generation by MPPT control of each string
- Possible to set output voltage from the cloud
- Support high-performance power generation monitor
- >IP44: waterproof and dustproof

\* Since the product is under development, the specifications and appearance shown here may change without notice.



Completed in November 2020 at Nipron's head office

<http://www.nipron.com>

Renewable energy products for a decarbonized society

<http://www.nipron.com>

# Exhibition report

We took part in the 7th INT'L SMART GRID EXPO Osaka.

Nipron took part in the 7th INT'L SMART GRID EXPO Osaka held for three days from September 9 to 11 at INTEX Osaka. This is a special exhibition in which all products and technologies necessary for building smart grids and distributed energy systems are presented.

At the Nipron booth, three products were introduced for the first time. The main feature was the Zero Energy Room. In recent years, in-house power consumption is attracting the eyes of many as evidenced in the introduction of in-house power consumption system for the entire building is difficult in terms of anticipation of large-scale blackout due to disaster and for the purpose of appealing eco-friendly corporate management. However, introduction of in-house power consumption system for the entire building is difficult in terms of the cost. Since the Zero Energy Room introduced in the exhibition can be introduced for a single room at a low cost, thus lowering the hurdle, Nipron's exhibit had caught the attention of many visitors. Other proposals included the new PV Maximizer, which maximizes the power generation and supports four-string input, and GP1UT, which is a 1U rectifier unit that converts the AC power received from the grid to the DC power. We would like to express our heartfelt appreciation to everybody who visited the Nipron booth.



**First appearance products**

**NEW!**

Quickly achieve Zero energy consumption, starting with a single room.

Zero Energy Room (See the page 9-10 for details)

Maximizing the power generation of solar power generation Support 4 strings input

**NEW!**

New model PV Maximizer (See the page 12 for details)

1U size insulation type rectifier unit for DC power supply

**NEW!**

GP1UT (See the page 12 for details)

# Nipron Sanda dream solar plant

The introduction of the PV Maximizer was completed.



Introduced PV Maximizer



Nipron Sanda dream solar plant Area of land: 5,161m<sup>2</sup>

Nipron has acquired a solar power station that is in operation in Sanda City, Hyogo Prefecture last year to enhance the sales promotion of the "PV Maximizer" for the secondary market of solar power stations, which has become more active recently. In addition, PV Maximizer and PV Guardmyan were completely introduced in Nipron Sanda dream solar plant.

We will perform a demonstration of repowering, a process to restore the original power generation capacity as it was put into operation or a level near it. The repowering result will be introduced in future issues of Nipron Wave and by other means.

### Factor of lowering power generation

**Shade of weeds**

**Panel damage**

**Hot spot**

**Shade of fallen leaves**

**Shade of trees**

A wide range of power supply units is available. Call us to find out more. <http://www.nipron.com>

# The Productivity Improvement Presentation for Manufacturing Department

The Productivity Improvement Presentation for Manufacturing Department was held.

The Productivity Improvement Presentation for Manufacturing Department was held on July 19. In the event, a total of eight teams competed by presenting improvements and other achievements made in their work. After a stringent and fair deliberation, following the top three teams were awarded. The presentation turned out to be a very productive event in which various departments shared kaizen programs in production processes and approaches in developing skills of young employees who are expected to be the major force in the company's future. We believe that the steadfast effort of production department and its result will facilitate further improvement of product quality and reliability and help realize the workstyle reform. Nipron and its employees will continue to work together to further improve the company's productivity.



A scene of the presentation

**Gold prize**  
MDF Machine Implementation Team

**Silver prize**  
MDF Board Implementation Team

**Bronze prize**  
HDF Large/GP Power Supply Produce Section Team



Gold prize MDF Machine Implementation Team



Silver prize MDF Board Implementation Team



Bronze prize HDF Large/GP Power Supply Produce Section Team

# The Productivity Improvement Presentation for Sales & Administrative Departments

The Productivity Improvement Presentation for Sales & Administrative Department was held.

The Productivity Improvement Presentation by young employees of the sales and administrative departments was held on August 21. In the event, a total of ten teams competed by presenting improvements and other achievements made in their work. After a stringent and fair deliberation, following the top three teams were awarded. The event turned out to be a very fruitful one by sharing improvement activities performed routinely in each department.

The Sales Management Team, the gold prize winner, presented their kaizen activity in the tasks assisting sales persons. They say they will continue their kaizen activity to enable sales persons to focus on responding to customer inquiries and enhance the customer satisfaction level further.

Prior to the presentation, a factory tour of Hanshin Dream Factory was offered to sales persons and engineers. They were deeply moved by taking a look at the site of production for the products designed and sold by them.



A scene of the presentation



A scene of factory tour

**Gold prize**  
Sales Management Team

**Silver prize**  
General Affairs Team

**Bronze prize**  
Business Planning Team



Gold prize Sales Management Team



Gold prize Sales Management Team



Bronze prize Business Planning Team

When you are having trouble with your power supply, look to Nipron. <http://www.nipron.com>



# The Nipron Story, by Our President

## Marking the 50th anniversary of our company's founding thanks to you all!

How are you all doing in the late autumn 2020 (the second year of Reiwa)? This year started with the new coronavirus pandemic. Although the coronavirus threat tended to subside once, the increase in the number of new infections is becoming noticeable again mainly in Europe and the United States, intensifying concerns that the stagnation of the world economy may remain unsolved and develop into a great depression. The world's total debt amounts to \$90 trillion, almost the same as the world's total GDP, and is expected to continue to further increase in the future. This is the result of fiscal-stimulus packages to respond to the new coronavirus, but how will this debt be repaid? If even one country defaults on its debt, it may trigger a domino effect that makes other countries default one after another. In order to prevent such a chain reaction, countries around the world continue with monetary easing as an economic policy; this has caused a lot of anomalies and speculative phenomena on stock markets due to money gluts. I understand that there's no limit to worries for managers who have a heavy mental burden to steer the enterprise in such a situation.

Let's leave the world situation at that and move on to the events of Nipron.

This year marks the 50th anniversary of the founding of Nipron (40th anniversary of its establishment), and we were planning to hold a big commemorative event on November 4th by inviting customers and stakeholders who have been supporting us. However, it may pose a risk to hold a large gathering in these difficult times of the coronavirus pandemic, so we decided to postpone it for about a year. For the purpose of adding grace to this ceremony, we are developing a number of "new products commemorating the 50th anniversary" toward the 70th and 100th anniversaries, and each of them is being completed. Since this enthusiastic effort cannot be postponed, we decided to hold "50th Anniversary New Product Preview" as an internal event to recognize and reward our eight development teams. The types of new products are as follows.

- ① New PV Maximizer (miniaturization & cost reduction realized by integrating DC/DC converters for four strings and PV Guardmyan in a single board)
- ② 1U 6 kW rectifier
- ③ Power storage system container
- ④ Solar EV carport system
- ⑤ Power source for the EV charging stations (10 to 50 kW)
- ⑥ 5.5 kW 100% digital inverter
- ⑦ DAV system 5.5 kW 100% digital bidirectional insulated DC/DC converter
- ⑧ PV Guardmyan integrated version
- ⑨ UDP (DIN rail power supply) series
- ⑩ UZP-360/UZP-600
- ⑪ HN5P5 (lithium-ion battery built-in nonstop power supply unit), HPCSA-1500P-12VO
- ⑫ mFZP-075
- ⑬ Large-scale custom-made power supply unit, etc.

At this event, a product demonstration exhibition briefing session will be provided by all the above eight development teams to compare and evaluate items such as novelty of development, expected sales volume, impact on target market, functionality, and design. Then, winners of gold, silver, and bronze prizes will be announced and commended, and prize money will be awarded to appreciate the pains they have taken in the course of development. I'd like to take this opportunity to thank members of each development engineering team for their continued hard work, not just for this time, and bring our hearts together to make our products good sellers.

Looking back on the 50 years since our founding, I started a business with no capital, or barehanded, not in a planned manner at all. My startup began with a part-time contract job while searching for an environment where I could immerse myself in research and development work so much as to forget the time like I did in a company I was working until I quit (Miki Denki Seisakusho Co., Ltd., a protective relay manufacturer). Now I wonder how I have survived a messed-up life from those days till today. In this way, the only one driving force for me to start my business was a desire to "enjoy my work," which became one of our company's seven management philosophies: "the philosophy for opening up a business."

Besides being very ambitious and optimistic, I'm still a man of action who always wants to put his idea into practice; this keeps entertaining myself and has grown my ability to carry through. Along the way, I fell for smooth talking of a major company and signed a capital tie-up agreement with them, ending up a dissolution of the partnership in just a few years. Now that 50 years have passed since the company's founding in 1970 (the Osaka Expo year), I'm deeply moved to see our company has become what it is today.

Going forward, aiming to become the world's number one company specializing in power supplies, I will make further efforts together with our employees as long as I live to grow Nipron into a unique existence.

*Setsuo Sakai*  
*October 2020*



**Nipron Co., Ltd.**

<http://www.nipron.com>

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