

Solves the problem of reducing electricity charges

FEMS (Factory Energy Management System) solution

For private consumers photovoltaic systems and battery energy storage systems transformer facility package

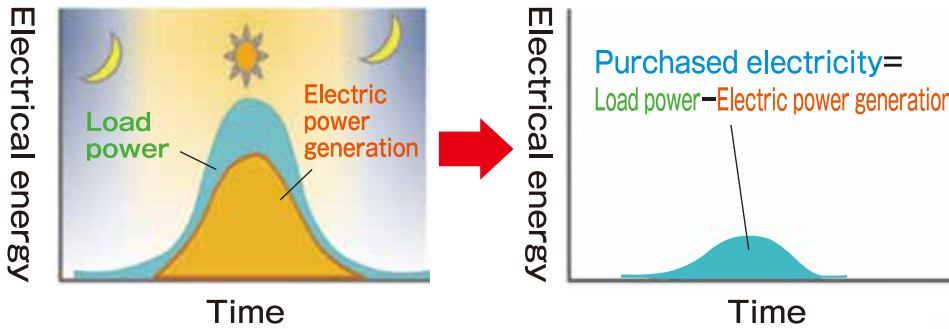
DISOLA® POWER STORAGE PACK

Solution 1

Use photovoltaic systems for private consumption at the factory

Reduction of electricity charges

Convert solar power without waste with industry's highest conversion efficiency. It can be effectively used for private consumption.



With this system, you can reduce 100 Million Yen / 20 years of electricity charges

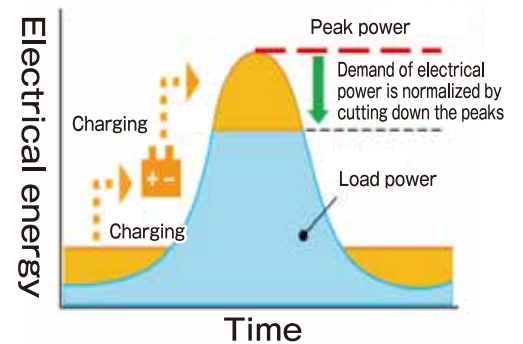
(Tentative calculation with unit price: 16 yen / equipment utilization rate 14%)
 ※In the case of 20 years with 250kW of photovoltaic systems

Solution 2

Cut the peak of electric power with battery energy storage systems

Reduction of electricity charges

Electricity generated by solar power and nighttime electricity are stored in the battery energy storage systems. By discharging in the time period when the load power concentrates, the peak of electric power is cut. It helps in minimizing the increase in basic electricity charge.

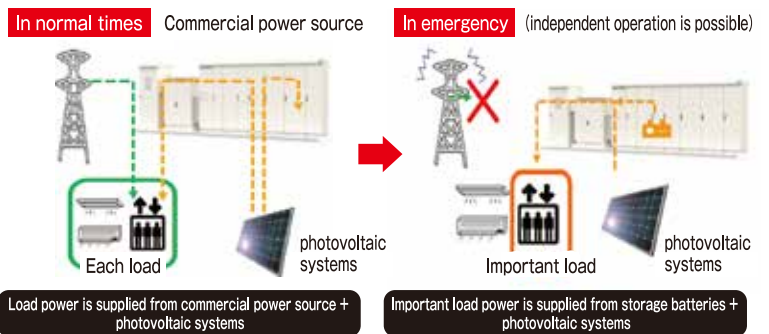


Solution 3

BCP* Measures

In preparation for disasters

In the emergency when the commercial power source is cut off, by supplying electricity from photovoltaic systems and battery energy storage systems, it allows the use of important devices.



※BCP: Business Continuity Plan

System configuration of DISOLA® POWER STORAGE PACK



High voltage interconnection panel

Rising voltage transformer solar trans

Solar inverter

Inverter for battery energy storage systems

Lithium ion battery

Feature 1

Utilizing photovoltaic systems without waste with industry's highest conversion efficiency

The system is composed by combining solar inverter with "air-conditioner-Free" and "solar transformer" having industry's highest class maximum efficiency. High efficiency in total system has been realized.

Distribution of energy within premises

Solar inverter with "air-conditioner-Free"
Maximum efficiency 98.8% is achieved

Photovoltaic cells



With this system,

Losses are reduced about 48% compared to the conventional product
Increase in earnings by 2 Million Yen over 20 years

Solar transformer

Maximum efficiency 99.1% is achieved

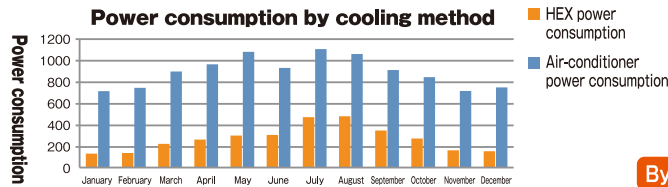
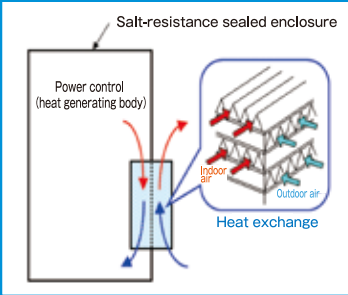
(Provisional calculation with unit price: 16 yen / facility utilization rate 14%) ※In the case of using 250kW photovoltaic systems for 20 years

Feature 2

Reduction in running cost due to excellent energy saving

We adopted the air heat exchange system which was awarded the industry's first energy conservation award for cooling the power control.

(Heat exchange (HEX) cooling method)



Cooling method	Annual power consumption	Power consumption charges for 20 years ('0000 Yen)
HEX	3,400	110
Air-conditioner	10,800	350

Large reduction in power consumption with air heat exchange (HEX) cooling method!

By using heat exchanger

About 2.4 Million Yen increase in earnings in 20 years

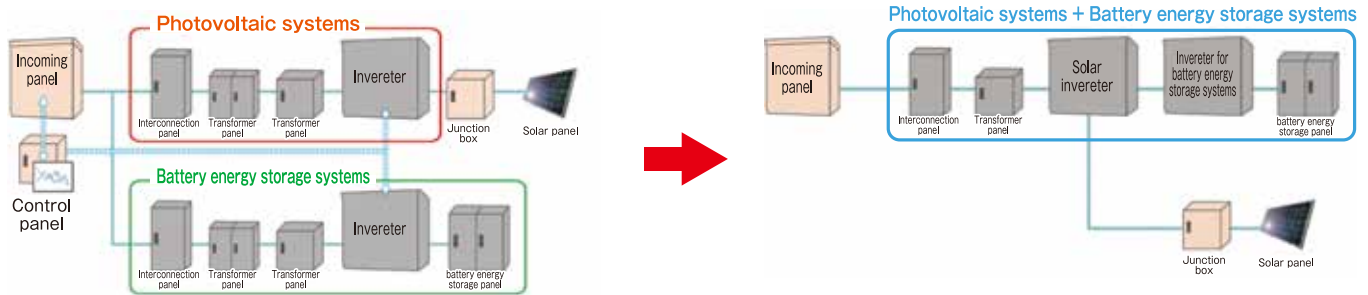
※ Calculated for 250kW+250kW system and electricity charges of 16 Yen/kWh

Feature 3

All in one package which is compact and which reduces installation charges

A compact configuration with integrated photovoltaic systems and battery energy storage systems.

By packaging it in one, system design is simplified. It is compact and it can be installed in one day at the shortest.



Daihen Head Office Juso (Osaka, Japan) Works Permanent Display

In addition, a monitoring monitor is installed in the lobby of the building that can display the amount of power generated by solar panels, the amount of charge and discharge power, and the amount of electricity purchased in real time.



Product name	DISOLA® POWER STORAGE PACK
Power control capacity	PV 250kW + battery energy storage systems 250kW
Rated output voltage	6,600V
Power control operation DC voltage range	430Vdc~850Vdc
Specifications of battery energy storage systems	Lithium ion battery
Capacity of battery energy storage systems	200kWh※
Dimensions (W) × (D) × (H)	9,000×1,700×2,406mm
Approximate mass	12,000kg
Place of installation	Outdoors

※Please consult us about the capacity of battery energy storage systems