

GALAXY 215

DISTRIBUTED ENERGY STORAGE CABINET



FFD POWERTEC CO.,LTD



Galaxy 215-2H

The Galaxy 215-2H is a rugged outdoor energy storage system cabinet designed to elevate your energy management capabilities. With an impressive 215 KWH LiFePO4 battery capacity, it comprises 15 battery modules, each boasting 14.33KWH, alongside a robust 100KW bidirectional AC-DC module and an advanced Energy Management System (EMS).

Built to Brave the Elements:

With an IP55 weather-resistant rating, the Galaxy 215 thrives in even the harshest conditions. Its sturdy design ensures your energy storage remains dependable, no matter what nature throws your way.

Efficiency at Its Best:

Equipped with an efficient air-cooling system, this cabinet guarantees optimal energy efficiency while maintaining unwavering reliability. Your energy needs are met, without compromise.

Safety Beyond Measure:

Safety is paramount, and the Galaxy 215-2H takes this seriously. It incorporates advanced safety features like pack-level aerosol fire suppression, water immersion sensors, integrated lighting, and smoke detectors. Rest easy, knowing your energy storage is protected.

Tailored for the Future:

Tailored for distributed energy storage, the Galaxy 215-2H maximizes the utilization of renewable energy sources. It not only lowers operational costs but also readily adapts to the ever-changing energy landscape, offering a sustainable and cost-effective solution for the future.

The Galaxy 215 -2H where power meets resilience and efficiency in one stellar package. Elevate your energy storage game today.



Product advantages :

- **BMU, RCU, and EMS Integrated Internally:** BMU, RCU, and EMS are integrated internally for seamless operation.
- **Modular Design, Support for Parallel Expansion:** Modular design allows for parallel expansion of functionality.
- **Multiple Operating Modes for Various Applications:** Supports various operating modes to suit different application scenarios.
- **Multiple Built-in Protection Functions (Lightning, Fire, Theft, etc.):** Multiple protection functions, including lightning protection, fire prevention, and anti-theft features, are built in.
- **Three-Phase 100% Unbalanced Load Capacity:** Capable of handling 100% unbalanced loads in a three-phase system.
- **Perfectly Matches Peak and Off-Peak Electricity Prices with Two Charge and Two Discharge Cycles:** Optimized for taking advantage of peak and off-peak electricity pricing with two charge and two discharge cycles daily.
- **Brand New A-Grade Battery Cells for Longevity (Over 6000 Cycles):** Equipped with brand new A-grade battery cells with a cycle life of over 6000 cycles.

Galaxy 215-2H Distributed Energy Storage Cabinet: Parameter



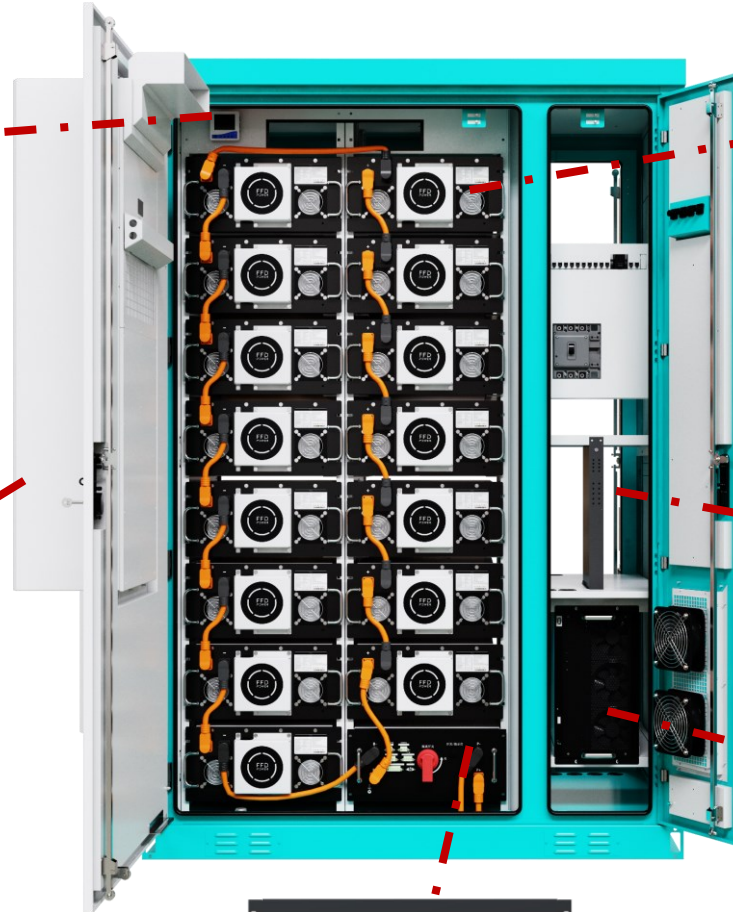
MODEL: Galaxy 215kWh-2H	
ESS	
Cell type	LFP, EVE LF280K
System battery configuration	1P16S*15
Battery capacity (BOL) at DC side	215 kWh
System output voltage range	600V~876V
Dimensions of battery unit (W *H * D)*	1600mm*2360mm*1050mm
Weight of battery unit*	≈2600kg
Degree of protection	ESS Cabinet IP55,PCS Cabinet IP44
Corrosion protection level	C 3
Relative humidity	0 ~ 95 % (non-condensing)
Operating temperature range	-30°C ~ 50°C (> 45°C derating)
Max. working altitude	3000 m
Cooling concept of battery Chamber	Smart air cooling
Fire safety equipment	Combustible gas detection and ventilation system, Water-based fire suppression
PCS	
Nominal AC power	100KW
Max.THD of current	<3%
Nominal grid voltage	400 V
Grid voltage range	360 ~ 440 V
Nominal grid frequency	50/60 Hz
Grid frequency range	45~55 Hz, 55~65 Hz



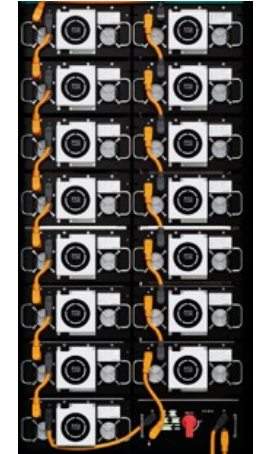
**PACK LEVEL + CABINET LEVEL
AEROSOL FIRE EXTINGUISHING DEVICE**



**Special cabinet air conditioner, hot
and cold air, IP55**



HV BOX



BATTERY CLUSTER

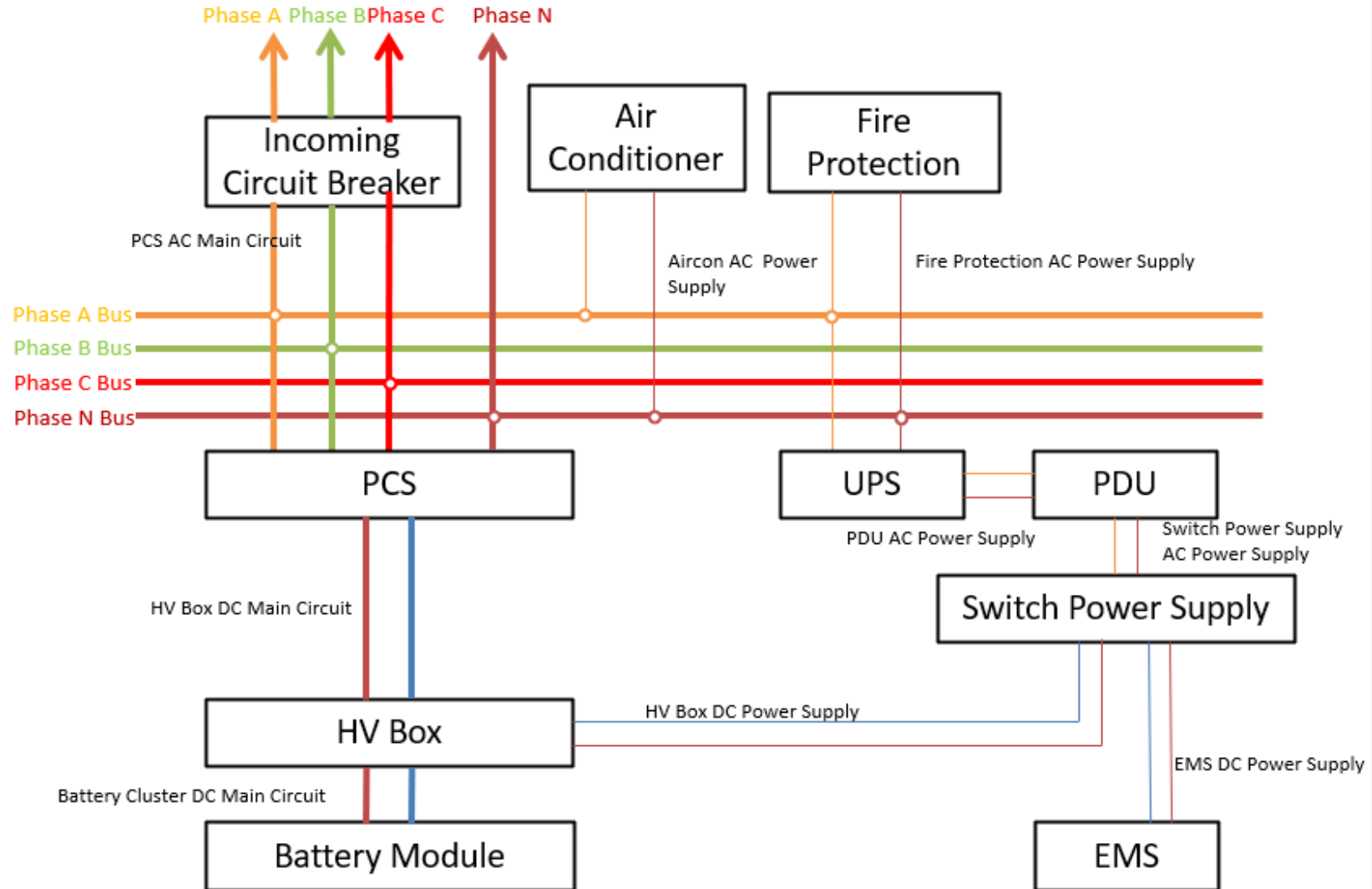


**PCS
100KW AC-DC**



EMS

Logic Diagram Of Electrical Appliances Inside



Benefits to use GALAXY 215-2H

- Peak Shaving and Load Shifting
- Preventing Solar Energy Wastage Due to Grid Limits
- Emergency Power Supply
- Transformers Not Enough

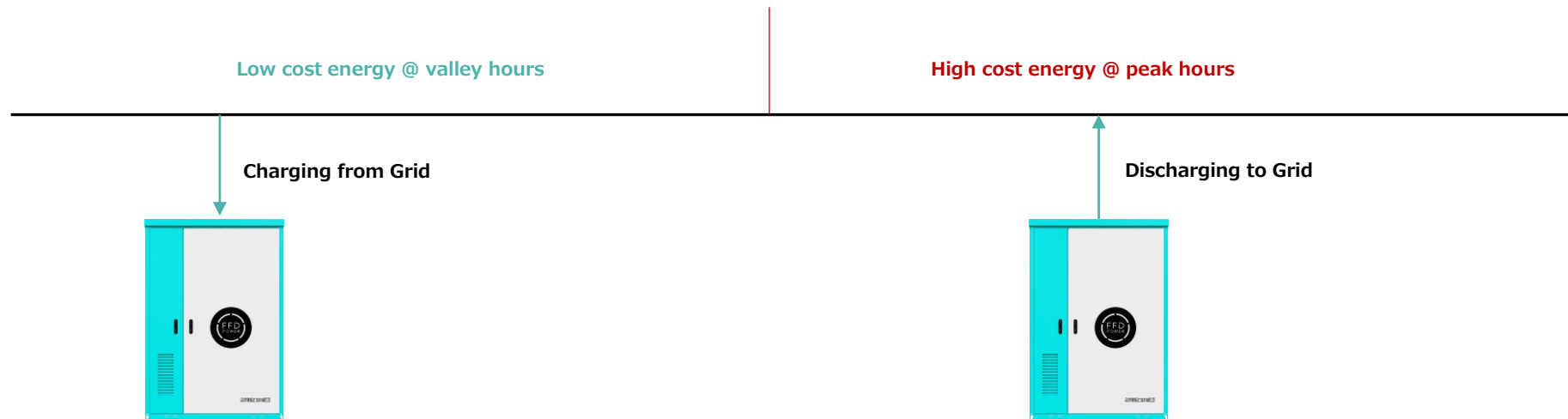
➤ Peak Shaving and Load Shifting

Our energy storage cabinets are the key to efficient electricity management. They empower you to save on energy costs and ensure a dependable power supply, all thanks to peak shaving and load shifting strategies.

****Peak Shaving:**** When electricity demand skyrockets during peak hours, electricity prices follow suit. Think scorching summer afternoons with air conditioners in overdrive. Our cabinets are your solution. They store surplus energy during low-cost, off-peak hours, effectively trimming the peak from your electricity consumption. When demand surges, this stored energy seamlessly kicks in, reducing your bills and lightening the load on the power grid, ensuring stable and efficient power supply.

****Load Shifting:**** Load shifting is all about cleverly timing your energy usage. Our cabinets are designed to do this automatically. They store electricity when it's abundant and affordable, typically during the night, and release it when costs are higher during the day. By aligning your energy consumption with low-price hours, you make the most cost-effective use of electricity, sidestepping the premium rates of peak demand periods.

In a nutshell, our cabinets unlock the benefits of variable electricity pricing throughout the day. They optimize your energy consumption, cut costs, and enhance energy management, all while promoting a more sustainable use of electrical resources. Upgrade your power management with our advanced energy storage technology.



➤ Harnessing excess solar energy to Grid

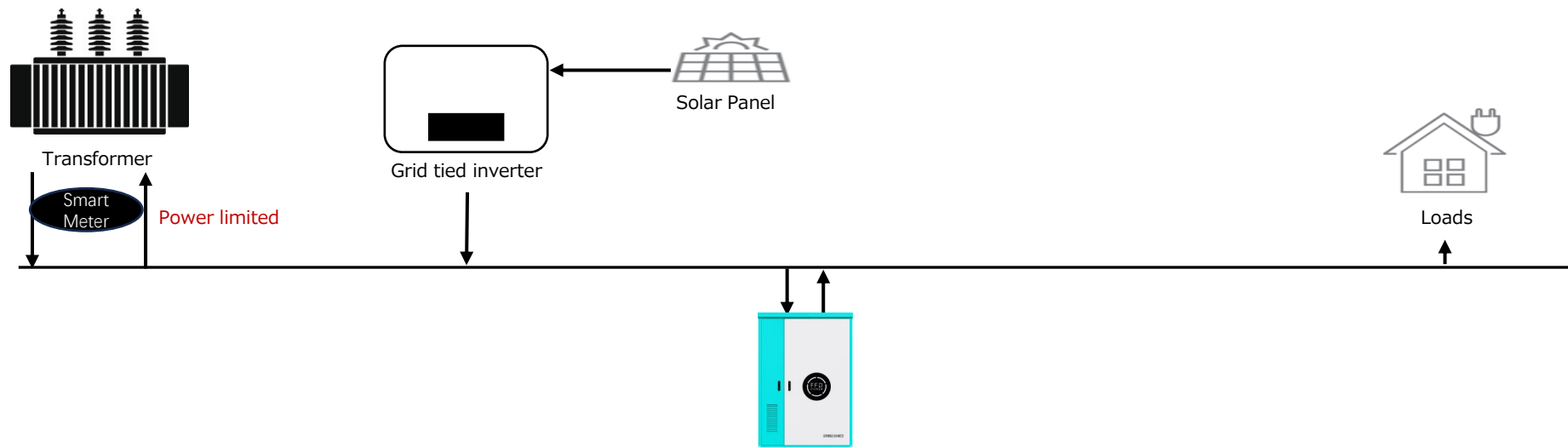
Solar energy, harnessed by photovoltaic (PV) solar panels, is a clean and renewable power source. However, many regions face challenges integrating this energy into the grid due to capacity limitations, often resulting in wasted energy. Here's how our energy storage cabinet tackles this issue:

Efficient Energy Capture: When your PV solar panels generate more electricity than you currently need, excess energy is typically sent back to the grid with little compensation. Our energy storage cabinet takes a proactive role by capturing and storing this surplus energy within its own battery system, preventing the loss of valuable renewable resources.

Optimized Energy Utilization: As the day progresses or electricity demands peak, the stored solar energy is utilized to power your home or facility. This ensures that the energy which would have gone to waste is now put to practical use, reducing your reliance on the grid during peak hours.

Grid Reliability: By reducing the need to export surplus solar energy, our energy storage cabinet minimizes stress on the grid, especially during sunny, high-production days. This supports overall grid stability and resilience as it no longer has to manage unpredictable surges of solar energy.

In summary, our energy storage cabinet acts as a vital buffer, capturing and utilizing excess solar energy that would otherwise be lost due to grid limitations. It optimizes energy consumption, lowers electricity bills, and contributes to a more efficient and sustainable use of solar power resources. This benefits both individual users and the broader electricity grid.



➤ UPS

An emergency power supply, exemplified by energy storage cabinets, is an indispensable asset tailored to address unforeseen events, guaranteeing uninterrupted power supply for the sustained functionality of critical systems in industrial and domestic environments.

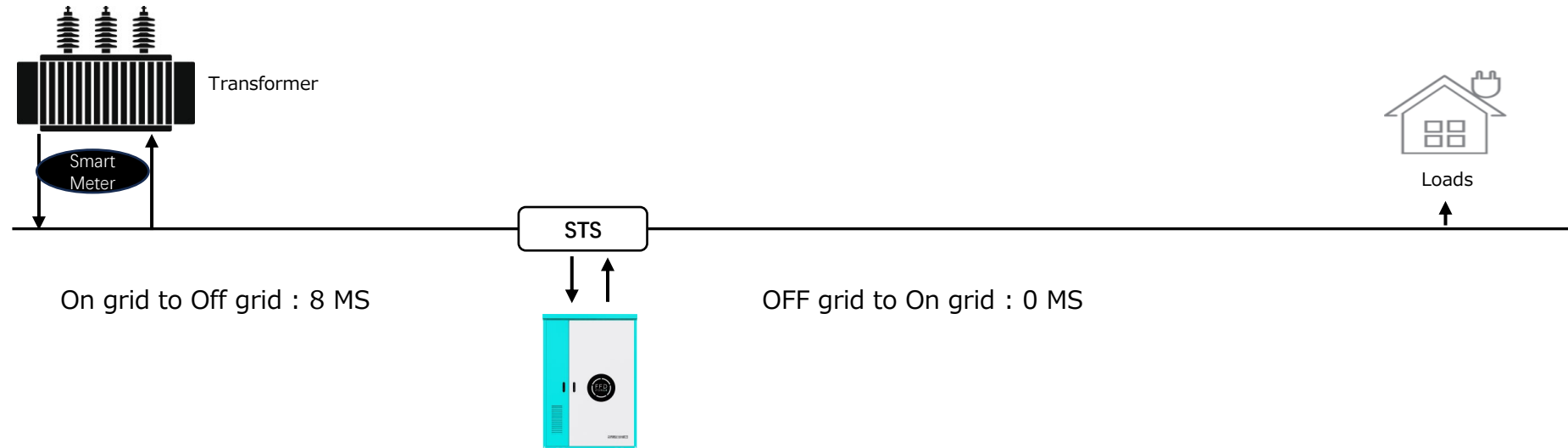
Industrial Applications:

Manufacturing Facilities: These sites are exceptionally sensitive to power interruptions, where even brief outages can yield substantial losses. Emergency power supplies sustain manufacturing lines, averting costly downtime and product loss.

Grid Resilience:

Grid Support: Emergency power supplies also enhance the resilience and stability of the broader power grid. By alleviating strain during peak demand or unexpected events, such as storms or accidents, these systems help mitigate widespread outages and expedite grid recovery.

In conclusion, emergency power supplies, exemplified by energy storage cabinets, perform an indispensable role in sustaining the seamless operation of critical systems across a diverse range of applications. They serve as dependable assets for mitigating the impacts of unforeseen events, guaranteeing uninterrupted operations, and fortifying overall grid resilience.



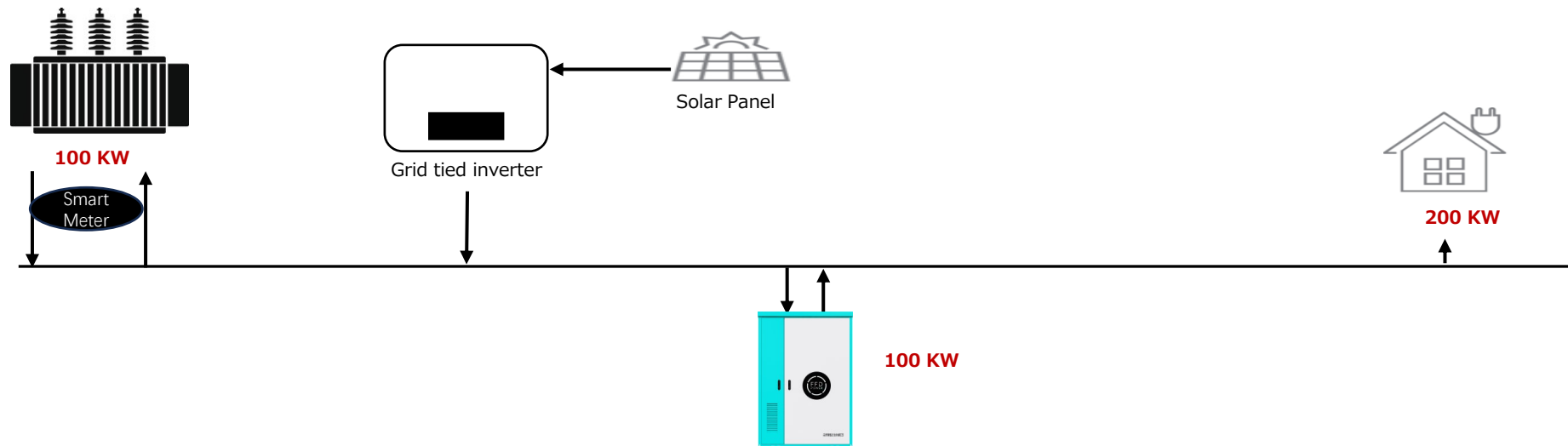
➤ Increasing transformer capacity

In numerous industrial and commercial power distribution systems, the expansion of businesses and the addition of equipment often outpace the capabilities of existing transformers. This necessitates applications to local electricity authorities for increasing transformer capacity, a process that can entail protracted wait times and substantial expenses, particularly in regions with aging power infrastructure. On certain islands, these applications can even stretch over several years. Energy storage cabinets, on the other hand, present an ideal solution in terms of both timing and cost.

How Energy Storage Cabinets Address Transformer Capacity Shortages:

Peak Load Management: Energy storage cabinets are meticulously engineered to accumulate excess electricity during periods of low demand, typically at night or when electricity prices are lower or store the energy of solar system . This eases the strain on transformers during peak demand intervals, such as scorching summer afternoons when air conditioning and industrial machinery operate at full tilt. This peak load management not only mitigates overloading but also effectively augments the original transformer's capacity, ensuring it operates within its designated limits.

Load Smoothing: Serving as protective buffers, energy storage cabinets supply electricity during high-demand periods, smoothing the load on transformers. This substantially curbs abrupt and often unpredictable fluctuations in power demand, further enhancing the efficient and stable operation of transformers.



Thank you for your attention



R&D CENTER

Floor 14th,15th,16th, Building One ,
Ping An Industrial Park, Ma Chong
Town , Dongguan City ,China

Manufacture

FuDa industrial Park , Building 2 ,
Futian Town , Huizhou City ,
Guangdong , China

Ang Li CEO

Tel/WhatsApp: +8613377773990
Mail : ang@ffdtec.com
www.ffdpower.com
FFD POWERTEC CO.,LTD