

Grid Demand Management System





Introduction

Power demand side management refers to the electricity management activities carried out by improving terminal electricity efficiency and optimizing electricity usage methods, while completing the same electricity consumption functions and reducing electricity consumption and demand, achieving energy conservation and environmental protection, and achieving low-cost electricity services. The main goals are to reduce peak load, increase low valley load, cut peak and fill valley, strategic savings, strategic growth, and flexible system load. Faced with potential markets, many domestic enterprises and scholars have also conducted unremitting research and exploration on power demand side management systems.

STANDARDPOWER has always been an expert in the field of power demand side management by providing load side management and equipment control methods. STANDARDPOWER also has a considerable number of advanced core technologies to further develop towards higher reliability data transmission.

System Principles

STANDARDPOWER is a power demand side management system that utilizes existing high/medium/low voltage power grids to centrally control any terminal device. Figure 1 shows the equipment distribution diagram of a typical system. The transmitter can be connected through transformers at 33KV and 11KV, while the receiver can operate at 220V and 380V low-voltage terminals. The entire network communication distance can reach up to 60 miles. The control center can communicate with devices through telephone networks, wireless networks, or dedicated lines, and the Terminal Control System software completes the control and load side management of the access devices. The control structure is shown in Figure .

Powe Demand Management System STANDARD POWER

In addition, the system can also achieve real-time monitoring, requirement analysis, and alarm control functions. Whether for any device system or complex power demand side management, STANDARDPOWER can provide stable, appropriate, and flexible solutions, while ensuring economy and efficiency. Figure 3 is a typical home load management system, which optimizes load management through telephone lines or other network forms in the control center, enabling equipment to operate energy-efficient and efficiently.

System characteristics

1. Wide communication range, long distance, and timely and effective.

2. The signal is connected to low voltage, and the transmitter structure is simple.

3 different networks, using the same receiver technology.

4. Excellent stability and excellent performance price ratio.

5 receivers can respond to multiple addresses, allowing levels Segmentation and control.

6. It can be remotely programmed and time set, such as a rate table, Replace batteries, etc.

7 can easily transmit information and instructions. For example: automatic

The temperature regulator sets the temperature remotely.

8 has load limiting function.

Main application areas of the system

- 1. Public lighting system;
- 2. Industrial load management;
- 3. Demand management;
- 4. Multi rate management
- 5 Home load management
- 6. Other various power demand side management.

