## EG4 ELECTRONICS

# TIME OF USE AND WEATHER OPTIMIZE FUNCTIONS FOR 18kPV

## TIME OF USE FUNCTION

- 1. Real-time Price Data Integration: The inverter establishes a real-time connection with the grid and will provide live updates on current electricity prices.
- 2. Maximize Economic Benefits: The primary goal of this function is to maximize cost savings by flexibly adjusting the battery's usage pattern without compromising the normal operation of the system.
- User Customization: Users can customize settings through the inverter's
  monitioring software based on individual needs and fluctuations in electricity
  prices. This customization enables the system to meet energy demands across
  different time periods.
- 4. Real-time Monitoring and Reports: Users can access real-time system status and detailed reports through the montoring software, helping users to better understand the system's performance and economic benefits.

#### **Operating Steps Using EG4 Monitioring**

- Complete Inverter Information: Users need to input necessary information about the inverter, such as the serial number, county, and postal code, into the monitoring system. The cloud platform automatically collects and analyzes daily electricity price data.
- 2. Data Transmission to Inverter: User settings are transmitted from the cloud platform to the inverter, ensuring the inverter understands the user's charging preferences and price strategies.
- 3. Inverter Feedback on Settings: The inverter provides feedback to the cloud platform, confirming the receipt of settings and executing charge/discharge operations according to user-specified strategies.

## WEATHER OPTIMIZE FUNCTION

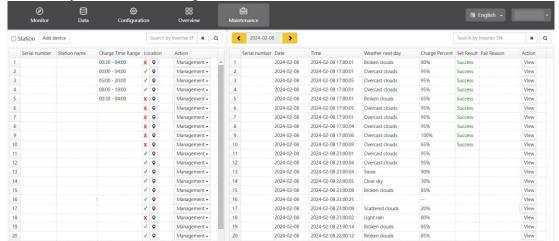
Our system introduces an advanced weather optimization function by collecting real-time weather data. The system offers multiple operating modes to adapt to various scenarios:

- Charge Priority Mode: This mode prioritizes battery charging to ensure stable electricity usage, making it suitable for areas with unstabe power supply.
- Self-use Mode: Designed for regions with higher electricity prices, this mode allows the system to prioritize self-generated solar power to meet household electricity demands.
- Forced Charge/Discharge Mode: Applicable in time-of-use pricing areas, the system will choose to charge, or discharge based on electricity pricing.
- Intelligent Charging Control: The system automatically adjusts the state of charge to maximize the efficiency of solar energy use based on real-time weather information.
- Stable Electricity Usage: While ensuring stable electricity consumption, the system optimizes
  charging strategies based on weather conditions, ensuring the battery remains adequately
  charged.

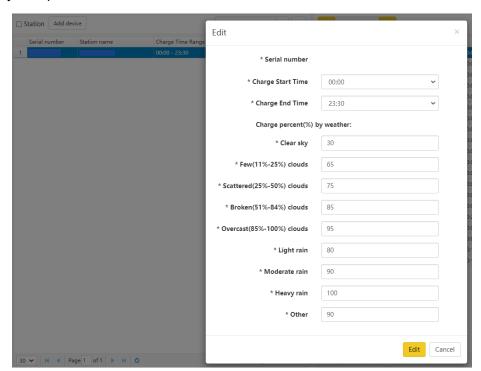
## EG4 ELECTRONICS

#### **Operating Steps Using EG4 Monitoring**

1. Address Input: Users input the device's location into the system, and the cloud platform automatically collects and categorizes local weather information.



2. Time and Percentage Settings: Users set charging times and percentages based on their electricity use patterns and weather conditions.



# EG4 ELECTRONICS

- 3. Data Transmission: The cloud platform sends user settings to the inverter.
- 4. Feedback and Execution: The inverter provides feedback to the cloud platform, confirming the receipt of settings and executing charging operations according to user-defined parameters.

