

普通用户手册

平台介绍



Monarch Edge平台是一套面向边缘能源站点的综合监控与分析平台，旨在为用户提供清晰、统一、可视化的站点运行视图。平台覆盖发电、储能、用能及告警等关键业务场景，通过标准化的界面与一致的交互方式，帮助用户快速掌握设备状态、运行趋势与异常情况，提升日常运维效率与管理质量。平台主要能力包括：

- 站点总览：**集中展示能量概况、能量流向、功率/能量趋势及站点与设备摘要，便于快速判断运行健康度。
- 设备监控：**按设备类型（光伏、储能、电表、柴油机等）提供概览与值监控页面，支持实时数据与状态查看。
- 告警管理：**区分当前告警与历史告警，支持查询、筛选与导出，便于异常定位与追溯。



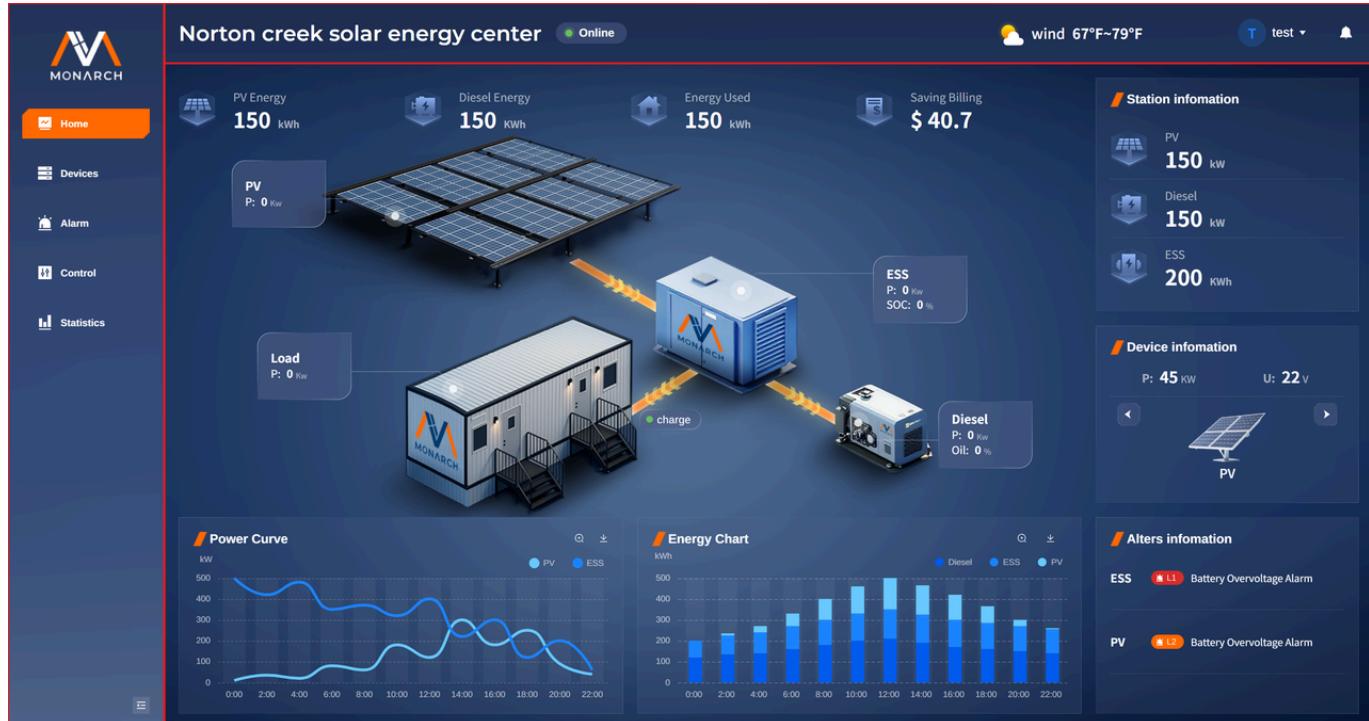
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- 运行统计**: 提供统计概览、曲线分析与运行/操作日志，支持运行数据复盘与趋势分析。
- 统一体验**: 表格筛选、分页、更新时间提示等交互一致，降低学习成本。本手册面向普通用户。

通用界面结构以及功能说明



整个用户界面首页主要分为三个部分：

- 左侧：侧边栏菜单**
 - 用户可以点击想要跳转的功能模块页面进行跳转，其中**Devices**、**Alarm**、**Control**、**Statistic**都具有二级菜单。当前页面所对应的菜单会高亮。其菜单信息如下：
 - Home** (首页)
 - Devices** (设备)
 - PV** (光伏)
 - Battery** (电池/储能)



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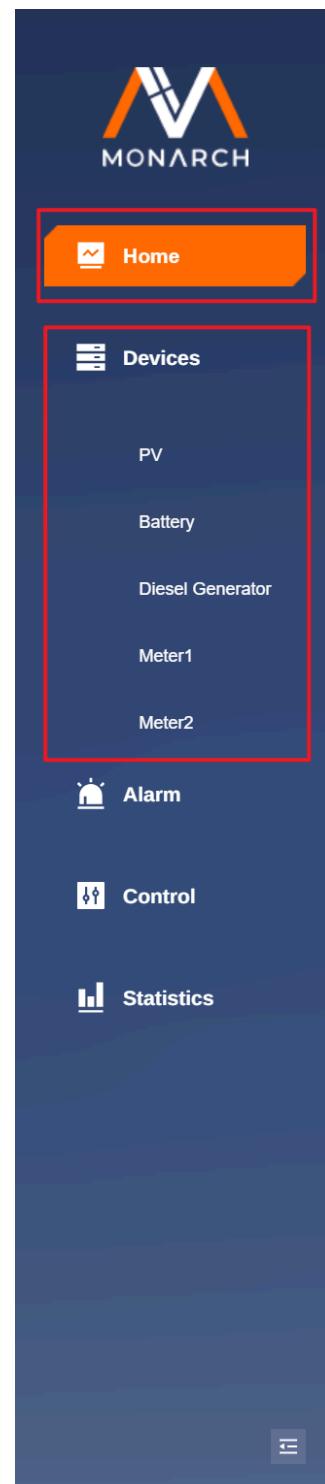
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- **Diesel Generator** (柴油发电机)
- **Meter1** (电表1)
- **Meter2** (电表2)
- **Alarm** (告警)
 - **Current Records** (当前告警)
 - **History Records** (历史告警)
- **Control** (控制)
 - **Control Record** (控制记录)
- **Statistics** (统计)
 - **Overview** (概览)
 - **Curves** (曲线)
 - **Operation Log** (操作日志)
 - **Running Log** (运行日志)



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- 用户可以通过侧边栏右下角的缩放图标按钮，进行菜单栏的宽度缩放。 |



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|

- 右上方：顶部栏



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顶部右侧有“铃铛”

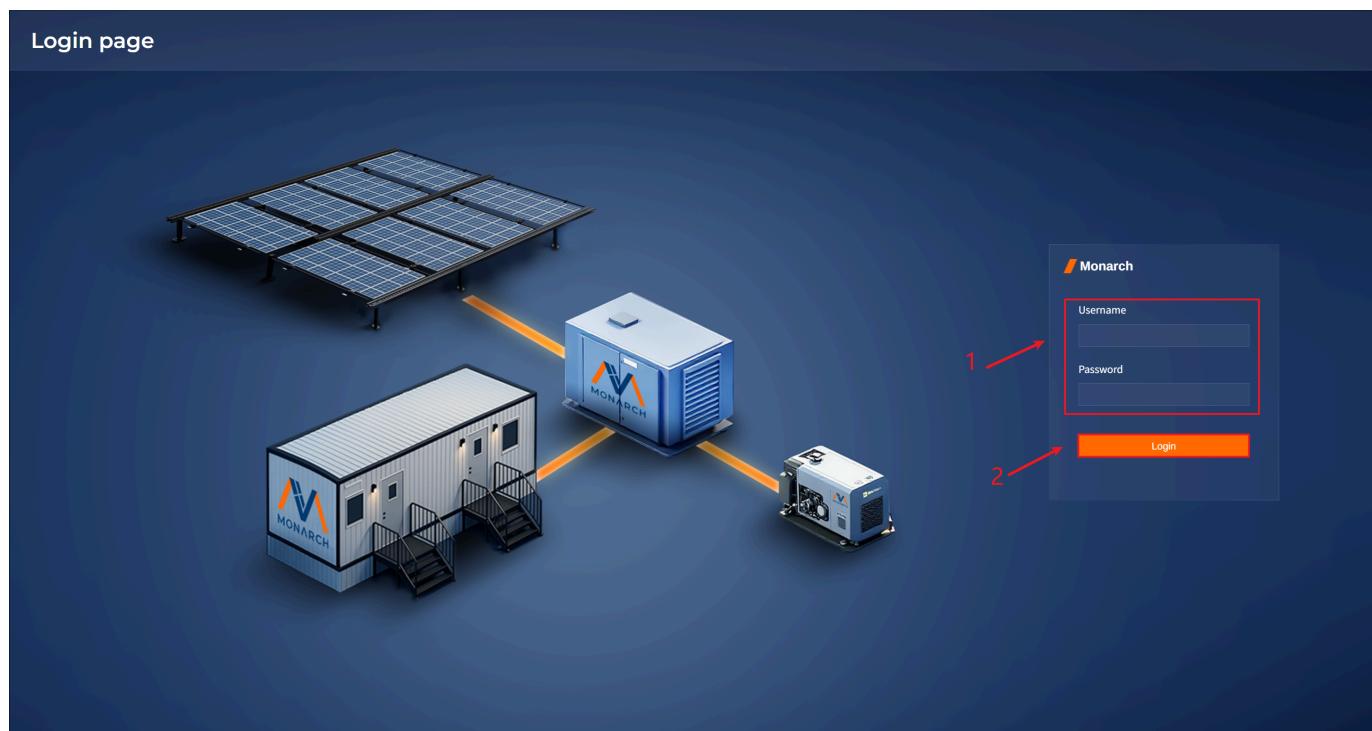


(Notice)" 入口:

- 有红色数字角标时表示“当前告警数量”
- 点击后会跳转到 Alarm > Current Records (当前告警)
- 右下方：主内容区
 - 展示当前页面数据

页面使用说明

Login 页面



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1. 打开系统后进入登录页 (Log in page)

2. 输入：

- **Username** : 用户账号的用户名称
- **Password** : 用户账号的密码

3. 点击 **Log in** 按钮登录

4. 登录成功后默认会进入**Home**页面。

Home 页面

Home页面主要展示站点以及具体设备的关键数据，并且随着设备状态实时进行数据刷新。



- 第一部分为站点的能量概览卡片，主要有对 **PV Energy**、**Diesel Energy**、**Energy Used**、**Saving Billing** 的统计数据。
- 第二部分为微电网系统的拓扑图，其展示了能量的流动方向（设备充放电情况），同时展示了各个设备的核心数据：



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- **PV:** P (当前功率)
- **Load:** P (当前功率)
- **ESS:** P (当前功率)、SOC (电池荷电状态)
- **Diesel:** P (当前功率)、Oil (当前柴油油量百分比含量)
- 第三部分为功率统计曲线，针对**PV**、**ESS**的功率进行统计。
- 第四部分为能量柱状图，针对**Diesel**、**ESS**、**PV**的能量情况进行统计。
- 第五部分为当前站点信息统计，对**PV**、**Diesel**的当前的功率进行统计，对**ESS**的充/放电情况进行统计。
- 第六部分为站点设备信息统计，分布对**PV**、**ESS**、**Diesel Generator**的P (当前功率)、U(当前电压)进行统计。用户可以通过点击左右的切换按钮进行设备的切换。



- 第七部分为站点告警信息，展示当前的告警信息，从左向右依次为：
 - 告警设备
 - 告警等级 (按照紧急度排序为：L1>L2>L3) |



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- 告警信息

Devices 页面

Devices 包含多个设备类型，包括：**PV**、**Battery**、**Diesel Generator**、**Meter1**、**Meter2**。每个设备的页面中通常有：

- **Overview (概览)** : 设备关键指标卡片/概览展示
- **Value Monitoring (值监控)** : 实时点位的表格展示，展示的是与真实设备绑定的通道中Telemetry、Signal的相关数据。

PV

Overview



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- 顶部为PV的4个指标卡片：
 - PV Power**: 光伏当前功率
 - PV Voltage**: 光伏当前电压
 - PV Current**: 光伏当前电流
 - Today's Energy**: 光伏今日发电量
- 中间为 PV 背景示意区域，鼠标悬停在行区域会显示该串光伏板的数据：

 - P**: 所选这串光伏板的功率
 - V**: 所选这串光伏板的电压
 - I**: 所选这串光伏板的电流

Value Monitoring



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Name	Value	Unit
grid_line_voltage_vab	-	V
grid_line_voltage_vbc	-	V
grid_line_voltage_vca	-	V
grid_phase_voltage_va	-	V
grid_phase_voltage_vb	-	V
grid_phase_voltage_vc	-	V
grid_phase_angle_ab	-	Degree
grid_phase_angle_bc	-	Degree
grid_phase_angle_ca	-	Degree
grid_frequency	-	Hz
grid_current_ia	-	A
grid_current_ib	-	A
grid_current_ic	-	A
grid_earth_current	-	A
grid_unbalance_current	-	A
grid_a_active_power	-	kW
grid_b_active_power	-	kW
grid_c_active_power	-	kW
grid_total_active_power	-	kW

Name	Status
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- 顶部显示 **Update Time**, 为最新获取到数据的时间。
- 下方是两张表：
 - 左面的表为通道的**Telemetry**表, 包含 **Name**、**Value**、**Unit** 信息。
 - 右面的表为通道的**Signal**表, 包括 **Name**、**Status** 信息。

Battery

Overview



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Charge Discharge Status 0	SoC 0 %	SoH 0 %
Voltage 0 v	Current 0 A	Power 0 kW
Max Cell Voltage 0 v	Min Cell Voltage 0 v	Avg Cell Voltage 0 v
Cell Voltage Difference 0 v	Avg Cell Temperature 0 °c	

该页面以卡片列表形式展示电池关键指标：

- **Charge/Discharge Status:** 电池充放电状态
- **SoC:** 电池电量百分比
- **SoH:** 电池健康度
- **Voltage:** 电池当前电压
- **Current:** 电池当前电流
- **Power:** 电池当前功率
- **Max/Min/Avg Cell Voltage:** 电池Cell的最大/最小/平均电压
- **Cell Voltage Difference:** 电池Cell最大电压差
- **Avg Cell Temperature:** 电池Cell平均温度

Value Monitoring



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The screenshot shows the 'Value Monitoring' section of the 'Battery' tab. It displays two tables of data:

Name	Value	Unit
BamsVoltage	-	V
BamsCurrent	-	
BamsPower	-	Kw
BamsSoc	-	%
BamsSoh	-	%
BamsPermitChgPower	-	Kw
BamsPermitDsgPower	-	Kw
BamsPermitChgCurrent	-	A
BamsPermitDsgCurrent	-	A
BamsBcuSocDiff	-	%
BamsBcuMinSoc	-	%
BamsBcuMinSocNo	-	
BamsBcuMaxSoc	-	%
BamsBcuMaxSocNo	-	
BamsMaxCellVol	-	V
BamsMaxCellIVBcuBmuNo	-	
BamsMaxCellVNo	-	
BamsMinCellVol	-	V

Name	Status
BaFaultCode0_Bit0	
BaFaultCode0_Bit1	
BaFaultCode0_Bit2	
BaFaultCode0_Bit3	
BaFaultCode0_Bit4	
BaFaultCode0_Bit5	
BaFaultCode0_Bit6	
BaFaultCode0_Bit7	
BaFaultCode1_Bit0	
BaFaultCode1_Bit1	
BaFaultCode1_Bit2	
BaFaultCode1_Bit3	
BaFaultCode1_Bit4	
BaFaultCode1_Bit5	
BaFaultCode1_Bit6	
BaFaultCode1_Bit7	
BaFaultCode2_Bit0	
BaFaultCode2_Bit1	

该页面包含 Tab：

- **Battery**: 电池
- **PCS**: 储能变流器/功率变换系统

每个 Tab 都是 “Update Time + 左右表格” 的形式，同PV的Value Monitoring页面。

Battery Management



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本页面主要监控所有**Battery Cell**的**Voltage**和**Temperature**的情况。

- 左侧：显示所有Cell的电压情况
 - 模块上方分别显示**最大Cell电压**和**最小Cell电压**。
 - 模块下方以卡片形式列出 #1~#N (Battery Cell) 的电压值
- 右侧：显示所有Cell的温度情况
 - 模块上方分别显示**最大Cell温度**和**最小Cell温度**。
 - 模块下方以卡片形式列出 #1~#N (Battery Cell) 的温度值

Diesel Generator

Overvie



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顶部指标卡片：

- **Power (功率)**
- **Oil (当前油含量)**
- **Voltage (电压)**
- **Coolant Temp (冷却液温度)**

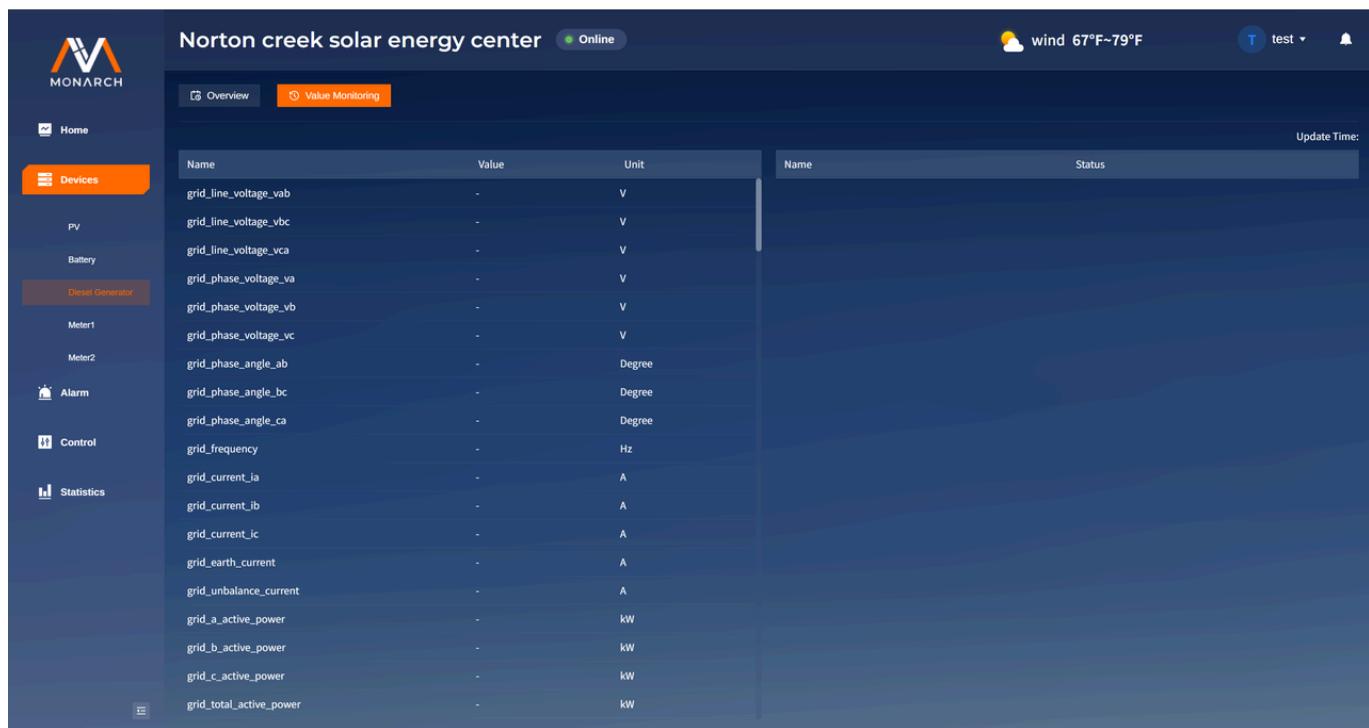
Value Monitoring



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Name	Value	Unit
grid_line_voltage_vab	-	V
grid_line_voltage_vbc	-	V
grid_line_voltage_vca	-	V
grid_phase_voltage_va	-	V
grid_phase_voltage_vb	-	V
grid_phase_voltage_vc	-	V
grid_phase_angle_ab	-	Degree
grid_phase_angle_bc	-	Degree
grid_phase_angle_ca	-	Degree
grid_frequency	-	Hz
grid_current_ia	-	A
grid_current_ib	-	A
grid_current_ic	-	A
grid_earth_current	-	A
grid_unbalance_current	-	A
grid_a_active_power	-	kW
grid_b_active_power	-	kW
grid_c_active_power	-	kW
grid_total_active_power	-	kW

结构同 **PV** 的 **Value Monitoring** 页面。

Meter1

Meter1 直接展示**Value Monitoring**信息，其结构同**PV**的 **Value Monitoring**页面。



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Norton creek solar energy center Online

wind 67°F~79°F test Bell

Update Time:

Name	Value	Unit
grid_line_voltage_vab	-	V
grid_line_voltage_vbc	-	V
grid_line_voltage_vca	-	V
grid_phase_voltage_va	-	V
grid_phase_voltage_vb	-	V
grid_phase_voltage_vc	-	V
grid_phase_angle_ab	-	Degree
grid_phase_angle_bc	-	Degree
grid_phase_angle_ca	-	Degree
grid_frequency	-	Hz
grid_current_ia	-	A
grid_current_ib	-	A
grid_current_ic	-	A
grid_earth_current	-	A
grid_unbalance_current	-	A
grid_a_active_power	-	kW
grid_b_active_power	-	kW
grid_c_active_power	-	kW
grid_total_active_power	-	kW
grid_reverse_power	-	kW

Meter2

Meter2直接展示Value Monitoring信息，其结构同PV的 Value Monitoring页面。

Norton creek solar energy center Online

wind 67°F~79°F test Bell

Update Time:

Name	Value	Unit
grid_line_voltage_vab	-	V
grid_line_voltage_vbc	-	V
grid_line_voltage_vca	-	V
grid_phase_voltage_va	-	V
grid_phase_voltage_vb	-	V
grid_phase_voltage_vc	-	V
grid_phase_angle_ab	-	Degree
grid_phase_angle_bc	-	Degree
grid_phase_angle_ca	-	Degree
grid_frequency	-	Hz
grid_current_ia	-	A
grid_current_ib	-	A
grid_current_ic	-	A
grid_earth_current	-	A
grid_unbalance_current	-	A
grid_a_active_power	-	kW
grid_b_active_power	-	kW
grid_c_active_power	-	kW
grid_total_active_power	-	kW
grid_reverse_power	-	kW



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Alarm 页面

Alarm页面为告警记录页面，用户可以通过该模块对当前的告警信息以及历史告警信息进行查看。

Current Records

表格字段介绍：

- Name: 规则/告警名称
- Channel ID: 通道 ID
- Level: 告警等级图标
- Start Time: 触发时间 筛选操作： 用户可以对右上角的选择框进行告警等级的选择，以对当前告警记录进行筛选。

History Records

表格字段介绍：

- Name: 规则/告警名称
- Channel ID: 通道 ID
- Level: 告警等级图标
- Start Time: 告警触发时间
- End Time: 告警处理结束时间 筛选操作： 用户可以通过以下筛选条件进行筛选：
- Warning Level: L1/L2/L3
- Start Time: 开始时间
- End Time: 结束时间 用户点击Search按钮，可以针对筛选的条件进行搜索；点击Reload按钮，重置所有的筛选条件并搜索。 列表信息导出： 用户点击Export按钮可以导出历史告警的excel文件，其表头如下：

Control

Viewer 通常只具备“查看控制记录”的权限，不具备下发控制的权限。



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Control Record

表格字段介绍：

- Name: 规则/告警名称
- Channel ID: 通道 ID
- Level: 告警等级图标
- Start Time: 触发时间 筛选操作： 用户可以对右上角的选择框进行告警等级的选择，以对当前告警记录进行筛选。

Statistics

Statistics 顶部有 4 个页签：

- Overview (概览)
- Curves (曲线)
- Operation Log (操作日志)
- Running Log (运行日志) 【截图占位： Statistics 四个页签 (Overview/Curves/Operation Log/Running Log) 】

Overview

页面内容 该页以图表为主，通常包含：

- Energy consumption (能耗概览卡片)
- Energy Distribution (能源分布：环形图)
- Power Trend (功率趋势：折线图)
- Energy Chart (能量柱状图) 常用操作
- 切换时间范围：点击右侧时间按钮
 - 6 Hour / 1 Day / 1 Week / 1 Month
- 查看图表提示



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- 鼠标移到图表上，可看到某时间点的值 (tooltip) 【截图占位：Statistics Overview (时间按钮+图表区)】

Curves

Curves 页与 Overview 类似，也以图表为主，操作方式相同：

- 选择筛选条件 (Select filter condition)
- 切换时间范围 (6h/1d/1w/1m)
- 查看图表提示与趋势变化 【截图占位：Statistics Curves (筛选+时间按钮+图表)】

Operation Log

页面内容 表格列通常包含：

- User (用户)
- Role (角色)
- Action (动作)
- Device (对象/设备)
- Result (结果)
- Time (时间)
- IP Address (IP) 支持分页。【截图占位：Operation Log (表格+分页)】

Running Log

页面内容 该页以“日志文本流”的方式展示系统运行信息：顶部通常有 Export (导出) 按钮。

常见问题 (FAQ) 与排障

1. 页面一直没有数据、设备 Update Time 不更新 请按顺序自查：
 2. 刷新页面 (F5)
 3. 切换到别的菜单再切回来



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4. 看顶部是否能正常跳转告警页 (验证基础路由正常)

5. 让管理员检查：

- 后端服务是否正常
- WebSocket 推送源是否正常
- 设备/通道是否在线 建议你向管理员提供：
 - 发生问题的页面 (例如：Devices > PV > Value Monitoring)
 - 当时的时间点
 - 是否所有设备都无数据，还是某一类无数据

2. 登录后又被跳回登录页 可能原因：

- 账号已过期/密码错误
- Token 刷新失败 建议：
 - 重新登录一次
 - 仍失败请联系管理员重置账号

术语表

- Viewer: 只读用户，主要查看数据与记录
- Channel (通道) : 采集/通信的逻辑通道 (例如 Modbus 通道)
- Point (点位) : 具体的测点/信号 (例如某路电压/电流)
- Telemetry (遥测) : 连续量 (一般为数值 + 单位)
- Signal (遥信) : 状态量 (一般为 0/1 或状态码)
- SoC: State of Charge, 电量百分比
- SoH: State of Health, 健康度



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- Update Time: 当前页面数据最近一次刷新/推送的时间



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