

### 浙江禾川科技股份有限公司

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CN 安装说明

**EN** Installation Sheet

## ⚠ 1. 安全注意事项 (Safety precautions)

本说明书涉及产品为工业产品,并且均为开放型外壳设计。要求用户使用产品时,务必将产品安装于具有防尘、防潮以及免于电击 / 冲击等意外的控制柜内,并且需要设置保护措施以防止非维护人员不当操作或 意外导致设备故障或损坏,造成不可避免的人员危险和财产损失。

The products in this manual are industrial products and are all open-type housing designs. It is essential to install these products within a control cabinet that is safeguarded against dust, moisture, and accidents such as electric shocks or physical impacts. Additionally, protective measures must be taken to prevent malfunctions or damage caused by improper operation or accidents involving non-maintenance personnel. Failure to do so may lead to serious risks to personnel safety and potential loss of property.

#### 更详细的信息请参考 QP 系列硬件手册。

Please refer to the QP series hardware manual for more detailed information.

万年历电池扩展卡内置 CR2032 电池,电池型号为 CR2032(3V),可自行选购符合 UL 认证且规格参数合适的电池进行更换。

▲ <sup>电池</sup> Battery The RTC battery expansion card comes with a built-in CR2032 battery (3V). Users may replace it with a UL-certified CR2032 battery of matching specifications.

La carte d'extension de batterie du minuteur temps réel (RTC) est équipée d'une batterie CR2032 intégrée (3V). Les utilisateurs peuvent la remplacer par une batterie CR2032 certifiée UL et de spécifications correspondantes.

### 2. 命名规则 (Model identification)

HC QXB - RTC - BD

| 1               | <b>产品名称(Product name)</b><br>禾川(Hechuan Technology) |  |  |  |
|-----------------|---|--|--|--|
| HC              |   |  |  |  |
|                 |   |  |  |  |
|                 |   |  |  |  |
| 2               | 选配卡系列(Expansion card series)                        |  |  |  |
| <b>2</b><br>OXB | 选配卡系列(Expansion card series)<br>Q系列选配扩展             |  |  |  |

| 3   | 产品系列(Product series)         |  |
|-----|------------------------------|--|
| DTC | 万年历电池卡                       |  |
| RIC | (RTC battery expansion card) |  |

| 4  | 后缀 (Suffix)              |  |  |
|----|--------------------------|--|--|
| BD | BD选配卡 (Optional BD card) |  |  |

#### 3. 适用型号 (Applicable model)

| 名称 (Name) 型号 (Model) |              | 适配的主机型号 * (Applicable controller model) | 简要说明(Brief description)  |  |
|----------------------|--------------|---|--|--|
| 扩展卡                  | HCOXB-RTC-BD | HCQ0P-1200-D4                           | 万年历电池卡,控制器断电后,可维持万年历计时   |  |
| Expansion card       | HCQXB-RTC-BD | HCQ1P-1300-D4                           | The RTC battery backup card continues timekeeping when the controller power is disconn |  |

<sup>\*</sup>注: 万年历电池扩展卡可安装在主机扩展卡槽 A/B 的位置,但仅限一个。

#### 4. 环境规格 (Environmental specifications)

| 4.1 环境规格(Environmental requirements) |                       |                             |   |  |
|--------------------------------------|-----------------------|-----------------------------|---|--|
| 项目                                   | Item                  | 规格                          | Specifications  |  |
| 海拔高度                                 | Altitude              | ≤2000m                      | ≤2000m  |  |
| 使用环境                                 | Operating environment | 控制柜内安装,开放式及室内使用             | Installation within a control cabinet, open-type and indoor use |  |
| 工作温度                                 | Operating temperature | 0~55°C                      | 0~55°C  |  |
| 储存温度                                 | Storage temperature   | -25~70℃                     | -25~70°C  |  |
| 环境湿度                                 | Ambient humidity      | 10~90%RH(无结露)               | 10~90%RH (non-condensing)                                       |  |
| 振动耐受                                 | Vibration resistance  | 5~150Hz(X/Y/Z方向,1g/3.5mm位移) | 5~150Hz (X/Y/Z direction, 1g /3.5mm displacement)               |  |
| 污染等级                                 | Pollution degree      | 污染度2                        | Level 2   |  |
| 冷却方式                                 | Cooling method        | 自然冷却                        | Natural cooling   |  |
| 防护等级                                 | IP rating             | IP20                        | IP20  |  |
| 外壳材质                                 | Enclosure material    | 阻燃材料                        | Self-extinguishable   |  |

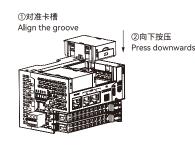
<sup>\*</sup>注:若设备未依制造商指定方式使用,设备所提供的保护可能会被减弱。

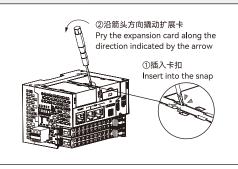
## 5. 安装说明(Installation instructions)

## 5.1 扩展卡拆装(Expansion card mounting and dismounting)

将扩展卡沿卡槽放入水平放置控制器卡槽中,并向下按压扩展卡,听到"咔哒"声后确认表面平齐即完成安装;将一字螺丝刀插入卡扣处,按箭头方向撬动扩展卡使其控制器脱离,将扩展卡垂直取出即可完成拆卸。

During mounting, place the controller horizontally, then align the groove of the expansion card with that of the controller and press the expansion card downwards. After hearing the "click" sound, check whether the junction surface is flush, if it is then the installation is completed. During dismounting, insert a screwdriver into the card snap, pry the expansion card along the direction indicated by the arrow to disengage it from the controller, and then remove the expansion card vertically to complete the dismounting process.





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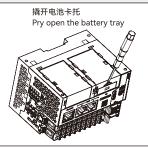
<sup>\*</sup>Note: The RTC battery expansion card can be installed in either expansion slot A or B of the host controller, but only one card is allowed.

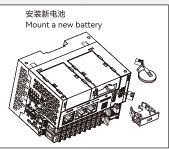
<sup>\*</sup>Note: If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

### 5.2 电池拆装 (battery mounting and dismounting)

用一字螺丝刀沿拆卸口撬开电池卡托, 在电池卡托上安装新电池, CN 连接电源线端子即可完成安装; 反之断开电源线端子, 从电池卡 托上取出旧电池可完成拆卸。

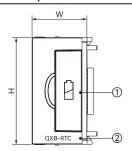
During mounting, use a flathead screwdriver to pry open the battery tray at the designated notch, mount a new battery in the tray, and then connect the power terminal to complete the installation. During dismounting, disconnect the power terminal and then remove the old battery from the tray.

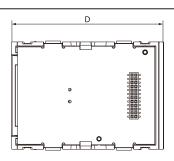






# 6. 接口和尺寸说明(Interface and dimension description)





| 序号<br>(No.) | 名称    | Name                | 功能               | Function  |
|-------------|-------|---------------------|------------------|---|
| 1           | 电池安装区 | Battery compartment | 禾川标配电池安装区, 电池可更换 | Compartment for the pre-installed HCFA battery, user-replaceable design for maintenance |
| 2           | 产品型号  | Product model       | 显示扩展卡型号          | Displays expansion card model   |

| 型号 (Model)   | 外形尺寸 (Dimension): mm |      |      | (w )          |
|--------------|----------------------|------|------|---------------|
|              | w                    | н    | D    | 重量(Weight): g |
| HCQXB-RTC-BD | 18.6                 | 36.1 | 51.1 | 15 approx.    |