

⚠ 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.

2. 命名规则 (Model identification)

HC QXB - ENET - BD

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|-----|--|------|---|----|--------------------------|
| 1 | 产品名称 (Product name) | 3 | 产品系列 (Product series) | 4 | 后缀 (Suffix) |
| HC | 禾川 (Hechuan Technology) | ENET | 独立IP网卡 (Dedicated IP Network Interface Card (NIC)) | BD | BD选配卡 (Optional BD card) |
| 2 | 选配卡系列 (Expansion card series) | | | | |
| QXB | Q系列选配扩展 (Q-Series optional expansion) | | | | |

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 Expansion card | HCQXB-ENET-BD | HCQ0P-1200-D4 HCQ1P-1300-D4 | 以太网独立IP扩展卡，百兆速率，支持ModbusTCP、TCP/UDP、EtherNet/IP、OPCUA服务器、标签通讯等；支持程序上下下载及监控 Dedicated 100 Mbps Ethernet IP expansion card supporting Modbus TCP, TCP/UDP, EtherNet/IP, OPC UA Server, tag-based communication, program upload/download and real-time monitoring |

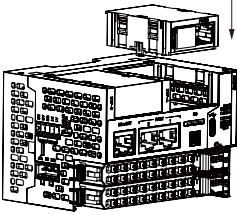
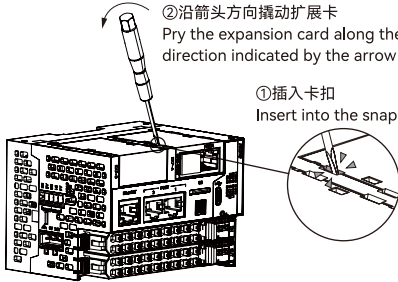
* 注：以太网通讯扩展卡仅支持安装在主机扩展卡槽 B 的位置。
*Note: Ethernet communication expansion card can only be installed in expansion slot B of the host controller.

4. 环境规格 (Environmental specifications)

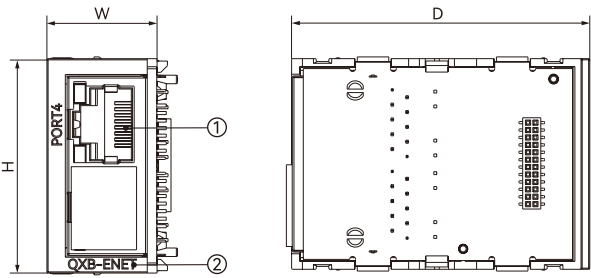
| 4.1 环境规格 (Environmental requirements) | | | |
|---------------------------------------|-----------------------|------------------------------|---|
| 项目 | Item | 规格 | Specifications |
| 海拔高度 | Altitude | ≤2000m | ≤2000m |
| 使用环境 | Operating environment | 控制柜内安装，开放式及室内使用 | Installation within a control cabinet, open-type and indoor use |
| 工作温度 | Operating temperature | 0~55℃ | 0~55℃ |
| 储存温度 | Storage temperature | -25~70℃ | -25~70℃ |
| 环境湿度 | Ambient humidity | 10~95%RH (无结露) | 10~95%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 |

* 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。
*Note: If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

5. 安装说明 (Installation instructions)

| 5.1 扩展卡拆装 (Expansion card mounting and dismounting) | | |
|---|---|---|
| CN | 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。 | <div><div><div>①对准卡槽 Align the groove</div><div>②向下按压 Press downwards</div></div><div></div></div> <div><div><div>②沿箭头方向撬动扩展卡 Pry the expansion card along the direction indicated by the arrow</div><div>①插入卡扣 Insert into the snap</div></div><div></div></div> |
| EN | 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. | |

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



| 序号 (No.) | 名称 | Name | 功能 | Function |
|-------------|---------------------|---|---|---|
| 1 | PORT4: EtherNet通讯接口 | PORT4: EtherNet communication interface | 百兆以太网口，支持ModbusTCP、TCP/UDP、EtherNet/IP、OPCUA服务器、标签通讯等；支持程序上下载及监控 默认IPV4: 192.168. 8.100 子网掩码: 255.255.255.0 | 100 Mbps Ethernet Port, supporting Modbus TCP, TCP/UDP, EtherNet/IP, OPC UA Server, tag-based communication, program upload/download and real-time monitoring Default IPV4: 192.168. 8.100 Subnet mask: 255.255.255.0 |
| 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 | | | 重量 (Weight) : g |
|---------------|-----------------------|------|------|-----------------|
| | W | H | D | |
| HCQXB-ENET-BD | 18.6 | 36.1 | 51.1 | 25 approx. |

7. 指示灯说明 (Indicator description)

| 丝印 (Screen printing) | 指示灯含义 (Indicator meaning) | 颜色 (Color) | 状态 | Status | 说明 | Description |
|-------------------------|--------------------------------------|----------------|----|----------|---------------|---|
| PORT4 | Ethernet 通讯 (Ethernet connection) | 绿色 (Green) | 熄灭 | Not lit | 未建立物理连接或电源未接通 | Physical connection is not established or power supply is not connected |
| | | | 常亮 | Lit | 建立物理连接 | Physical connection is established |
| | | 橙色 (Orange) | 熄灭 | Not lit | 未收发数据 | Communication data is not being sent or received |
| | | | 闪烁 | Blinking | 正在收发数据 | Data is being sent or received |

